September 2004

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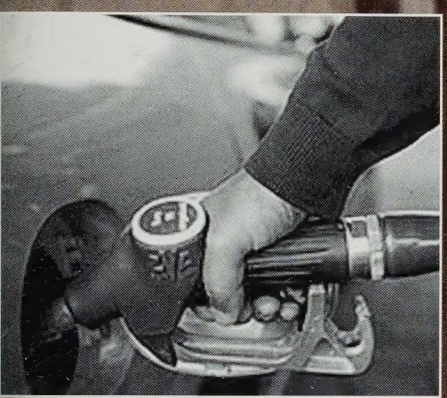
MONTHLY LABOR REVIEW

U.S. Department of Labor

Bureau of Labor Statistics



Import-export prices

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The *Monthly Labor Review* (USPS 987–800) is published monthly by the Bureau of Labor Statistics of the U.S. Department of Labor. The *Review* welcomes articles on the labor force, labor-management relations, business conditions, industry productivity, compensation, occupational safety and health, demographic trends, and other economic developments. Papers should be factual and analytical, not polemical in tone. Potential articles, as well as communications on editorial matters, should be submitted to:

Editor-in-Chief
Monthly Labor Review
Bureau of Labor Statistics
Washington, DC 20212
Telephone: (202) 691–5900
E-mail: mlr@bls.gov

Inquiries on subscriptions and circulation, including address changes, should be sent to: Superintendent of Documents
Government Printing Office Washington, DC 20402
Telephone: (202) 512–1800

Subscription price per year—$49 domestic; $68.60 foreign. Single copy—$15 domestic; $21 foreign. Make checks payable to the Superintendent of Documents.

Subscription prices and distribution policies for the *Monthly Labor Review* (ISSN 0098–1818) and other government publications are set by the Government Printing Office, an agency of the U.S. Congress.

The Secretary of Labor has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Periodicals postage paid at Washington, DC, and at additional mailing addresses.

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Information is available to sensory impaired individuals upon request:
Voice phone: (202) 691–5200
Federal Relay Service: 1–800–877–8339.

POSTMASTER: Send address changes to *Monthly Labor Review*, U.S. Government Printing Office, Washington, DC 20402-0001.

Cover designed by Bruce Boyd

MONTHLY LABOR
REVIEW

Volume 127, Number 9
September 2004

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The September *Review*

Our lead article welcomes back an annual review of international prices for imports and exports to the United States. Melissa E. Schwartz finds that import price increases abated in 2003 compared with 2002, while the rate of increase in export prices rose substantially. Price increases for petroleum and related products were much less sharp than in the previous year, but those for other imports accelerated somewhat. On the export side, price increases were larger for both agricultural and nonagricultural items.

David Fairris and Edward Levine analyze the decline in unionization in the Mexican workforce. They find that demographic and economic factors such as industry, occupation, and worker characteristics account for a relatively small part of that decline, while institutional and structural changes account for much more.

Kenneth N. Fortson examines the diurnal, or intraday, pattern of occupational injuries. Using injuries data from the Texas Workers' Compensation Commission and working time data from the Current Population Survey, Fortson concludes that injuries are much more prevalent at night, even after accounting for worker characteristics, broad industry and occupational classification, and length of time at work.

Jonathan A. Schwabish uses data from the Employment Cost Index as the basis of an analysis of possible correlations between wages and benefits. Among workers in the lower 10 percent of earnings, he finds significant negative relationships between wages and benefits such as life insurance and pension plans in several specifications of a regression equation.

Gerald Perrins contributes the first in what we plan as a series of "Reports from the Regions." Perrins, the regional economist in the Bureau's Philadelphia office, reports on employment trends in the information sector.

David Langdon, Rachel Krantz, and Michael Strople provide a visual essay on post-recession trends in employment and related economic indicators. The visual essay format is another relatively new feature of the *Review*.

More than 10 jobs before 40

Persons born from 1957 to 1964 held an average of 10.2 jobs from ages 18 to 38. These younger baby-boomers held an average of 4.4 jobs while ages 18 to 22. The average fell to 3.3 jobs while ages 23 to 27, to 2.6 jobs while ages 28 to 32, and to 2.5 jobs from ages 33 to 38. (Jobs that span more than one age group were counted once in each age group, so the overall average number of jobs held is less than the sum of the number of jobs across the age groups.)

On average, men held 10.4 jobs and women 9.9 jobs from age 18 to 38. Men held 4.5 jobs from ages 18 to 22, but only 2.5 jobs from ages 33 to 38. The reduction in the number of jobs held in successive age groups was similar for women. For more information, see "Number of Jobs Held, Labor Market Activity, and Earnings Growth Among Younger Baby Boomers: Recent Results From a Longitudinal Survey," news release USDL 04–1678.

Summer youth labor force

The labor force participation rate for youth—the proportion of the population age 16 to 24 working or looking for work—was 67.2 percent in July 2004, about the same as in July 2003. These were the lowest rates for July since 1966. The proportion of 16- to 24-year-olds enrolled in school in July has grown over the last decade—from 16.3 percent in 1994 to 28.9 percent in 2004—and labor force participation rates for students are typically lower than for nonstudents. Only about half of the youth enrolled in school were in the labor force in July, compared with about three-fourths of those not in school. Find out more in "Employment and Unemployment Among Youth—Summer 2004," news release USDL 04-1590. (The data in this report are not seasonally adjusted.)

Veterans' unemployment in August 2003

The unemployment rates of male veterans ages 25 to 34 (4.7 percent) and ages 35 to 44 (3.8 percent) were lower than the rates of their nonveteran peers (6.3 and 4.8 percent, respectively) in August 2003. Among men 45 to 54 years, however, veterans had a higher jobless rate than nonveterans (5.4 versus 3.6 percent).

Female veterans ages 25 to 34 had a relatively high unemployment rate of 8.2 percent, but the rate was much lower for those ages 35 to 44 (3.4 percent). Among female nonveterans in these age groups, unemployment rates did not differ nearly as much—6.2 percent for those 25 to 34 years and 5.2 percent for those 35 to 44 years. Female veterans ages 45 to 54 had a jobless rate of 5.4 percent, little different from their nonveteran contemporaries.

The survey of veterans was conducted for the Bureau of Labor Statistics by the U.S. Census Bureau as a special supplement to the August 2003 Current Population Survey. The 2003 supplement was co-sponsored by the U.S. Department of Veterans Affairs and the U.S. Department of Labor's Veterans Employment and Training Service. These supplements have been conducted every two years since 1985. To learn more, see "Employment Situation of Veterans: August 2003," USDL 04–1378.

Review chief retires

Deborah P. Klein, Editor-in Chief of *Monthly Labor Review* and Bureau of Labor Statistics Associate Commissioner for Publications and Special Studies, retired last month after 38 years of service to the Bureau. □

U.S. import and export prices in 2003

Prices for imports and exports rose during 2003, with price increases for petroleum and petroleum products leading import prices; the overall export price index posted its largest gain since 1995

Melissa E. Schwartz

In 2003, overall U.S. import and export prices increased for the second consecutive year.[1] Prices for imports rose 2.4 percent, following a 4.2-percent rise in 2002, while export prices gained 2.2 percent, up from a 1.0-percent rise in 2002. During 2001–03, U.S. economic indicators for prices suggested a marked slowdown in inflationary pressures, and in May of 2003, the Federal Reserve Board expressed concern over the possibility of an "unwelcome substantial fall" in inflation.[2] Nevertheless, prices for agricultural and petroleum products—traditionally volatile price components—strengthened along with prices for other raw materials during 2003 to bring about overall gains for the year. However, the increases in prices for these two commodity areas, along with the depreciation of the U.S. dollar against many major foreign currencies, did not appear to have a significant impact on prices for imported finished goods.

Prices for imported petroleum and petroleum products led to the overall growth in import prices, but the 12.8-percent increase in the petroleum index was up far less than the sharp increase of 56.9 percent in 2002. The increase in the index for all imports excluding petroleum accelerated in 2003, rising 1.2 percent, compared with a modest 0.3-percent advance the previous year, as nearly all major categories of imports recorded price increases in 2003. The U.S. dollar's depreciation against many major currencies appeared to have a small impact on the 2003 increases in prices for imported finished goods.

Agricultural and nonagricultural export prices both increased in 2003 by larger amounts than in 2002, triggering the largest gain in the overall export price index since 1995. Over the past year, agricultural export prices jumped 13.4 percent, while nonagricultural commodities prices, led primarily by increases in prices for raw materials, were up 1.3 percent. Both components marked their largest December-to-December increase in the index since 1995. Automotive and consumer goods prices also increased in 2003, while the index for the capital-goods component posted its eighth consecutive annual decline. (See table 1.)

Other price measures

The Bureau of Labor Statistics produces various price indexes that measure different aspects of inflation in product markets: import and export price indexes, which measure the change in the prices of imports and exports of nonmilitary goods exchanged between the United States and the rest of the world; the Consumer Price Index, which measures inflation as experienced by consumers in their day-to-day living; and the Producer Price Indexes, which are a family of indexes that measure changes in the selling prices received by domestic producers of goods and services at various stages of processing. The Consumer Price Index for All Urban Consumers (CPI-U) rose 1.9 percent in 2003, a slowdown from its 2.4-percent advance in 2002. The core CPI-U, which excludes energy and food prices, increased 1.1 percent in 2003, less than the 1.9-percent rise in 2002 and the 2.7-percent increase in 2001. Smaller increases in prices for shelter costs, motor vehicle insurance, and medical

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Table 1. U.S. import and export price indexes, annual percent changes for selected categories of goods, 1994–2003

End use[1]	Description	Relative importance, November 2003[2]	Percent change for 12 months ended in December—									
			1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	Imports											
	All commodities	100.000	5.2	2.6	1.5	–5.2	–6.4	7.0	3.2	–9.1	4.2	2.4
	All imports, excluding petroleum	89.171	3.8	2.4	–1.8	–2.8	–3.3	.0	1.3	–4.5	.3	1.2
	All imports, excluding fuels	87.650	–	–	–	–	–	–	–	–	.0	1.0
0	Foods, feeds, and beverages	4.144	14.7	–2.7	–1.3	1.3	–3.1	–.3	–4.0	–4.7	5.9	3.0
1	Industrial supplies and materials	26.501	12.9	6.1	9.1	–10.4	–17.1	33.7	13.8	–24.6	21.9	9.5
	Industrial supplies and materials, excluding petroleum	15.670	9.0	6.4	–2.4	–1.7	–6.7	5.1	11.2	–14.6	5.8	7.2
	Industrial supplies and materials, excluding fuels	14.149	–	–	–	–	–	–	–	–	3.6	6.3
10	Fuels and lubricants	12.353	16.9	5.7	34.4	–23.8	–36.5	114.7	27.1	–41.9	53.7	13.2
100	Petroleum and petroleum products	10.831	20.3	6.0	33.7	–25.5	–40.8	137.2	17.6	–39.5	56.9	12.8
2	Capital goods	28.371	1.0	1.1	–3.8	–7.4	–5.0	–3.3	–2.1	–2.7	–2.4	–1.1
3	Automotive vehicles, parts, and engines	17.170	3.0	2.3	.0	.5	.0	.7	.7	–.2	.5	.9
4	Consumer goods, excluding automotives	23.794	1.1	1.8	–.7	–.9	–1.3	–.4	–1.2	–.8	–.7	.1
	Exports											
	All commodities	100.000	3.9	3.3	–1.1	–1.2	–3.4	.5	1.1	–2.5	1.0	2.2
	Agricultural commodities	8.540	–.2	17.3	–6.9	–2.9	–9.3	–6.8	3.1	–1.8	8.0	13.4
	Nonagricultural commodities	91.459	4.4	1.7	–.4	–1.0	–2.7	1.2	.9	–2.5	.4	1.3
0	Foods, feeds, and beverages	7.741	–2.7	19.9	–6.5	–3.3	–8.3	–5.7	1.7	–.5	7.9	12.6
1	Industrial supplies and materials	23.504	15.6	1.5	–2.3	–1.4	–7.1	5.3	3.6	–8.6	5.0	6.8
	Nonagricultural industrial supplies and materials	22.111	15.0	1.6	–2.2	–1.3	–6.9	6.3	3.3	–8.4	4.8	6.3
2	Capital goods	46.308	–1.1	1.8	.1	–1.6	–1.8	–1.1	.3	–.8	–1.3	–.6
3	Automotive vehicles, parts, and engines	10.870	1.5	1.6	.4	.8	.5	1.0	.5	.4	.8	.5
4	Consumer goods, excluding automotives	11.538	.5	1.6	1.4	.8	–.8	.6	–.4	.2	–.6	.6

[1] Bureau of Economic Analysis category.
[2] Relative importance figures are based on 2000 trade values.
NOTE: Dash indicates data not available.

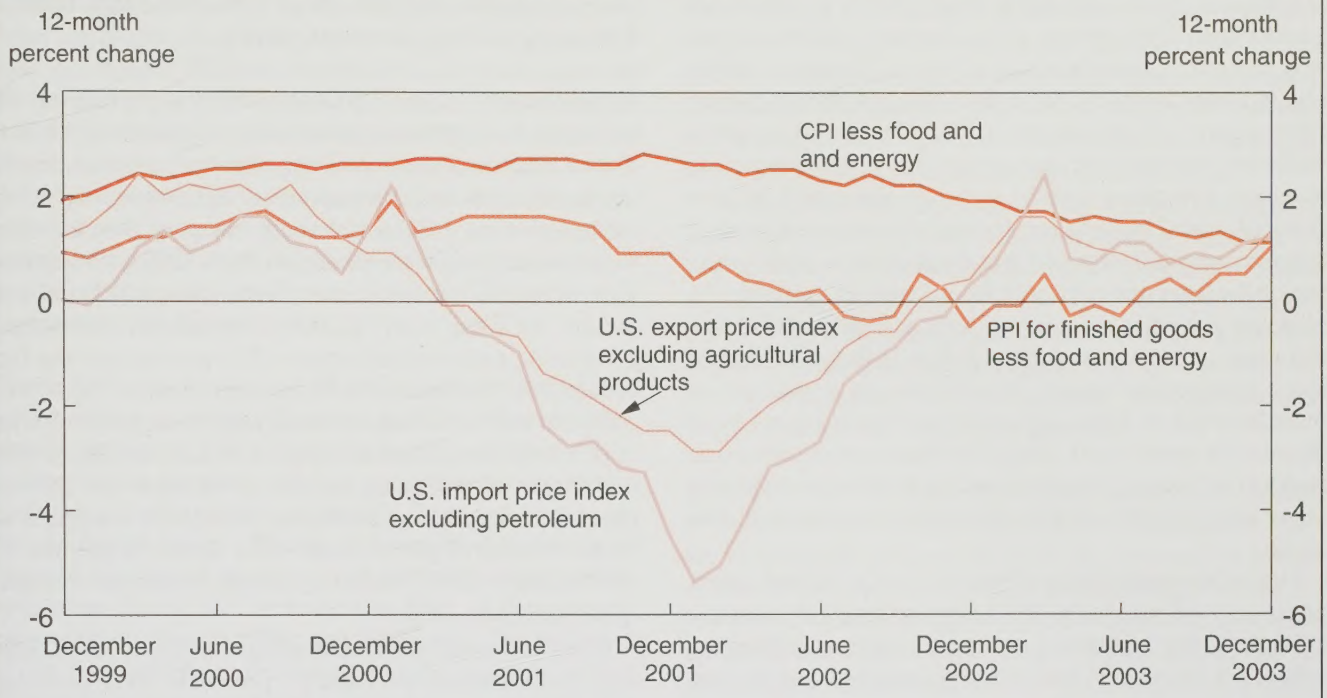
care, coupled with declines in prices for cigarettes and used cars, contributed to the increase in 2003.

The Producer Price Index (PPI) for finished goods increased 4.0 percent in 2003, following a 1.2-percent rise in 2002. Excluding food and energy prices, the PPI for finished goods was up 1.0 percent, and the PPI for intermediate materials was up 2.1 percent, in 2003. Prices for crude nonfood materials less energy increased 20.8 percent over the year. (See chart 1.)

Import price trends

Energy. Following a 56.9-percent spike in 2002, the index for petroleum and related products rose 12.8 percent in 2003, driven largely by a 12.0-percent increase in crude-oil prices. Tight world crude-oil supplies and geopolitical uncertainties in 2002 carried into 2003. In January, crude-oil prices rose sharply due to a shortage of imports from Venezuela, which faced a

Chart 1. Changes in the CPI, PPI, and import and export price indexes, 1999–2003



work stoppage at its State-owned oil company *Petróleos de Venezuela* from late 2002 into the early part of 2003. Venezuela ranks as the world's fifth-largest oil supplier and fourth as a supplier of crude oil to the United States. As a result of the work stoppage, U.S. refineries conserved existing crude inventories by reducing inputs into refinery production, thereby drawing down the inventories, which remained extremely low through February. Furthermore, strong seasonal demand, combined with Middle East supply disruptions and cuts in production levels from the Organization of Petroleum Exporting Countries (OPEC), pushed petroleum and related products prices higher in 2003. At the same time, natural-gas prices spiked 93.0 percent in the first 3 months of the year. Tight oil markets and bitterly cold temperatures early in the year sent demand for natural gas soaring, and by April, storage was more than 45 percent below the 5-year average.

By March, Venezuelan oil imports resumed, causing crude-oil prices to drop slightly. Then, in April, the U.S. advance in Iraq and an abundance of crude imports—a record average of 10.6 million barrels per day—led crude-oil prices to plummet 15.5 percent. Inventories in the United States subsequently increased by more than 12 million barrels, but remained at least 40 million barrels below 5-year averages. Similarly, prices for petroleum products and natural gas dropped due to a slackening oil market and moderating temperatures. By summer, however, seasonal travel demand pushed up gasoline prices, while demand for cooling increased natural-gas prices. Meanwhile, a 7-percent production cut announced by OPEC, coupled with a temporary decline in crude exports out of Iraq, kept crude-oil markets tight. Gasoline prices pushed higher in the summer due to a pipeline rupture in Arizona and a shutdown of three Midwest refineries as a result of the August power blackout. By fall, declines in demand allowed both natural-gas and crude-oil inventories to build back up somewhat; however, an announcement by OPEC that it would cut exports by a further 900,000 barrels of crude oil per day effective November 1 affected energy spot markets, and crude prices of imports rose 8.7 percent over the last quarter of 2003. Thus, despite the sharp increase during the first quarter, natural-gas prices fell 38.4 percent throughout the remainder of 2003, to finish up 18.8 percent overall over the year.

Nonfuel industrial supplies and materials. This component—which excludes petroleum, natural gas, coal, and nuclear and electrical energy—made up nearly 14 percent of the U.S. import price index for all commodities.[3] The price index for nonfuel industrial supplies and materials finished up 6.3 percent for the year, compared with a 3.6-percent increase the previous year. Prices for every subcomponent of nonfuel industrial supplies and materials advanced in 2003, with chemicals and unfinished metals prices having the largest impact. In the chemicals area,

which was up 4.5 percent for the year, fertilizers, insecticides, and pesticides prices, along with plastics prices, were the major contributors. Higher energy prices increased feedstock costs, which in turn pushed chemicals prices up. Unfinished metals also increased for the second consecutive year, by 8.4 percent, following an 11.4-percent rise in 2002. Gold and silver prices increased over the year due to speculative fund buying, as investors saw these metals as a safe alternative to other financial assets. Furthermore, favorable economic news, such as improvements in GDP growth and a declining unemployment rate, in the latter part of the year helped push up spot prices for platinum and other base metals, such as copper, nickel, and aluminum, reflecting hopes for a pickup in future demand for these production inputs. In addition, an expansion in manufacturing in Asia, particularly in China, helped boost demand for metal inputs, thereby creating upward pressure on world prices.[4] Indeed, China's demand for platinum in the jewelry sector was instrumental in sending platinum prices to 23-year highs.

Higher base-metal prices affected prices for finished metals, which rose 4.3 percent in 2003 after declining 1.1 percent in 2002. Prices for steelmaking and ferroalloying materials, along with prices for iron and steel products, increased over the year, up 19.4 percent and 6.2 percent, respectively. Although inclement weather early in the year, political nervousness over Iraq and Venezuela, and high energy prices affected the supply side of the world steel market, international demand for scrap was heavy, particularly in Asia. Domestically, a weak dollar and tariffs on imported steel caused the quantity of imported steel products to decline by more than 40 percent in 2003.[5]

Prices for building materials (such as lumber and panels) also pressed higher in 2003, up 13.7 percent for the year, following a modest 2.3-percent increase in 2002. Although demand was off in the first quarter of the year due to the slow winter season combined with market concerns over affairs in the Middle East, purchasing picked up in late spring because of low mortgage rates and strong housing starts, the latter up 15 percent for the year.[6] In August, plywood prices surged due to a large U.S. Government purchase for rebuilding Iraq and an increase in demand with Hurricane Isabel's arrival.[7]

The price indexes for paper and paper base stocks, for textile supplies and related materials, and for agricultural industrial supplies and materials all increased in 2003. Woodpulp prices rose a sharp 16.6 percent, the result of a first-quarter turnaround in prices due to weather-related industry shortages and energy costs. Textile supplies prices increased 4.0 percent for the year, reflecting higher cotton and energy prices and a weakened U.S. dollar. Finally, prices for agricultural industrial supplies and materials increased 4.6 percent in 2003, led by a surge in rubber prices. World prices for natural rubber increased primarily in the last 4 months of 2003, due to strong demand from tiremakers, increased market demand from China, and heavy rains in Southeast Asia that constricted supplies.[8]

Capital goods. Capital goods represent approximately 28 percent of U.S. imports and include many products, such as electrical generating equipment; computers, peripherals, and semiconductors; and transportation equipment, excluding motor vehicles. The capital-goods category was the only major import category to decline in 2003, falling 1.1 percent. This index has declined every year since 1995 and has trended with the steady decline in prices for computers, peripherals, and semiconductors—55.8 percent over the last decade. Since the end of the technology boom of the 1990s, computer and semiconductor sales have slumped along with sales of telecommunications equipment. Concomitantly, with rapid innovation keeping manufacturing costs low and the industry undergoing consolidation, prices have continued to decline steadily. Semiconductor sales showed a promise of rebounding in 2003, fueled by strong worldwide demand (particularly from Asia).[9]

Prices for capital goods, excluding computers, peripherals, and semiconductors, increased 1.2 percent in 2003, reversing the trend over the previous decade. The price index for electrical generating equipment increased 2.0 percent over the year. This index, along with prices for nonelectrical machinery, excluding computers, peripherals, and semiconductors, which rose 0.9 percent over the year, was influenced by exchange-rate effects and higher costs for raw materials. Similarly, prices for transportation equipment, excluding motor vehicles, increased 1.8 percent in 2003, the result of higher input costs, higher fuel prices, and the depreciation of the dollar.

Consumer goods. Consumer goods account for approximately 24 percent of U.S. imports. In 2003, consumer goods prices rose a modest 0.1 percent, the first annual increase since a 1.8-percent rise in 1995. Price movements within the consumer-goods category were mixed; price increases for manufactured nondurables and for nonmanufactured consumer goods offset a decline in prices for manufactured durables. Manufactured nondurables prices were affected, in general, by raw materials costs, along with exchange rates, while the decline in prices for manufactured durables was the result of declines in home entertainment equipment prices.

Automotive vehicles, parts, and engines. This component makes up about 17 percent of U.S. imports, and prices were up 0.9 percent in 2003, following a 0.5-percent increase in 2002 and a 0.2-percent decline in 2001. All subcategories of automotives, parts, and engines had price increases in 2003. Historically, most increases occur in the fall of each year with the introduction of new models.

As with most other categories of manufactured goods, raw material costs and the U.S. dollar's depreciation against many major currencies put upward pressure on prices for automotive parts and engines. However, import prices for automobiles did not increase as much as would be expected on the basis of the U.S. dollar's depreciation, indicating that foreign manufacturers absorbed some of the exchange-rate effects to maintain market share, particularly in the lower priced models. Prices for imported parts increased 0.7 percent in 2003, but were still 0.7 percent below 2000 levels. With sales slow and competition, in general, intense, auto manufacturers continue to pressure their suppliers to keep parts prices low.

Foods, feeds, and beverages. The price index for foods, feeds, and beverages increased 3.0 percent in 2003, following a 5.9-percent increase in 2002. Prices for agricultural foods, feeds, and beverages increased 4.6 percent, while prices for nonagricultural foods posted a decline of 1.7 percent. Beef prices pressed higher due to a smaller U.S. herd and a shortage of livestock because of an embargo on Canadian cattle imports. Vegetables prices also increased in 2003, by 3.4 percent, countering declines in coffee and fruit prices. The decline in prices for nonagricultural foods was the result of shrimp continuing to be in oversupply, while lobster prices fell after winter 2002–03 highs.

Locality of Origin price indexes. Another avenue for analyzing import price movements—particularly when assessing the impact of exchange rate fluctuations—is to consider import prices by country or region of origin. The Bureau produces such price indexes according to seven major regional categories: Industrialized Countries, Other Countries, Canada, the European Union, Latin America, Japan, and the Asian Newly Industrialized Countries (NIC's). Within the first five of these localities, the price indexes are further disaggregated by manufactured and nonmanufactured goods.

Import prices for the European Union increased 3.4 percent in 2003, following a 3.6-percent increase in 2002. The U.S. dollar depreciated significantly against major foreign currencies in 2003: over the year, the dollar fell against the Euro by 17 percent.[10] After rising 6.4 percent in 2002, the price index for Canadian imports increased 5.2 percent in 2003, a year in which the U.S. dollar fell against the Canadian dollar by 16 percent. Also in 2003, prices for imports from Japan edged up 0.1 percent, following a decline of 2.5 percent in 2002. The U.S. dollar declined against the Japanese yen by 12 percent in 2003. In general, currency effects have not been fully passed on to import prices, for a variety of reasons, including worldwide excess capacity preventing prices from rising; foreign exporters holding their prices steady to maintain market shares; and an increasingly integrated and competitive global economy weakening companies' power to pass on higher costs to customers.[11]

In contrast, the Asian NIC's price index fell 0.4 percent in 2003 after declining by 2.7 percent in 2002 and 5.5 percent in 2001. Prices for finished goods—particularly capital goods—were the primary contributors to the downward trend in this index. Furthermore, the Asian NIC's price index is unaffected by currency fluctuations, because the respective currencies are either pegged to the U.S. dollar or managed within a specified range.

Energy prices also affected the Locality of Origin price indexes, including the index for Latin American imports, which rose 3.7 percent in 2003. Prices for nonmanufactured imports from Latin America rose 10.6 percent over the year. Oil and gas imports from Canada and the European Union totaled nearly $30 billion in year-2000 weights, and the respective 8.7-percent and 14.1-percent increases in those commodities' (non-manufactured imports) prices reflect higher energy prices.

Services. The Bureau publishes a set of services price indexes, primarily transportation related. The U.S. import price index for air passenger fares, which measures fares paid to foreign carriers by U.S. residents for international travel, declined 0.2 percent in 2003 after rising 1.4 percent in 2002. The price index for import air freight, which measures changes in rates paid for the transportation of freight from foreign countries to the United States on foreign air carriers, increased 7.5 percent in 2003. Unlike the index's 11.8-percent gain in 2002—the result of the West Coast port shutdowns—the 2003 increase parallels the U.S. dollar's depreciation and demand-driven increases in shipment volumes.

Inbound ocean liner rates picked up in 2003, increasing 26.3 percent over the year. The majority of the increase occurred worldwide, concomitantly with contract renegotiations in the second quarter. The renegotiations came about out of attempts to compensate for unanticipated industry growth and high demand that began in 2002, particularly from China, the United States, and Europe.[12] Inbound crude-oil tanker freight rates also increased in 2003, by 16.8 percent. Prices surged in the first quarter due to diminished tanker availability. Thereafter, a reversal in tanker freight rates was followed in late fall by a resumption of rate increases, driven by seasonal stockpiling and weather-related transit problems.

Export price trends

Agricultural goods. Prices for foods, feeds, and beverages rose 12.6 percent in 2003, following an 8.0-percent increase in 2002. Substantial increases in soybean and meat prices contributed to the rise in the overall foods, feeds, and beverages index. Soybean harvest shortages due to hot, dry weather in South America and Europe led to diminished world supplies, and significant demand from China and Europe pushed soybean prices higher. Meat supplies, particularly beef, have been tight due to the ban on imports of live cattle from Canada. Moreover,

concerns about avian flu in Asia led to a widespread slaughter of chickens on that continent.

Agricultural industrial supplies and materials increased 15.3 percent in 2003, following a 9.2-percent rise in 2002. Prices for cotton and tallow were the primary contributors to the 2003 increase. Also, China's demand for cotton imports has grown by nearly 600 percent in the last year.[13] Meanwhile, world stocks of cotton were low in 2003, and the combined result of this, together with China's rising demand, was an increase in cotton prices. Prices for tallow, which is an animal fat and a substitute for soybean and other oils, followed increases in soybean oil prices. Relatively low slaughter counts resulting from the Canadian cattle embargo added to the upward pressure on tallow prices.[14]

Nonagricultural industrial supplies and materials. The category of nonagricultural industrial supplies and materials accounts for about 22 percent of U.S. exports and includes goods such as energy, metals, paper, chemicals, industrial textiles, rubber, and building materials. The price index for this category rose 6.3 percent in 2003, up from a 4.8-percent increase in 2002. Prices for chemicals and metals were the major contributors to the annual increase; prices for fuels and building supplies increased in 2003 for reasons similar to their import counterparts.

Export prices for steel, woodpulp, and synthetic rubber increased substantially in 2003. Rising energy prices and heavy demand from Asia—China in particular—caused ferrous scrap prices to soar. The export woodpulp industry similarly benefited from Chinese demand, offsetting the economic downturn of the domestic pulp and paper sector since the most recent U.S. recession. In addition, prices for synthetic rubber, a substitute for natural rubber, followed the upward movement of world prices for that commodity.

Capital goods. On the export side, capital goods represent approximately 46 percent of the volume of U.S. trade. As with the import side, prices for capital goods for export declined in 2003. The 0.6-percent drop followed declines of 0.8 percent and 1.3 percent in 2001 and 2002, respectively. Prices for computers, peripherals, and semiconductors, down 4.3 percent over the past year and 47.7 percent over the past decade, are the primary mover of capital-goods prices. Import and export prices for computers and semiconductors have behaved similarly, the result of a competitive industry and declining manufacturing costs. Also contributing to the annual decline in capital-goods prices were telecommunications equipment prices, which fell 4.3 percent in 2003 and 3.0 percent in 2002.

After finding themselves overinvested in infrastructure at the end of the technology boom of the 1990s, telecommunications firms have been forced to restructure debt and cut costs in the face of strong competition. Consumer demand, however, remains strong as well.[15] The other components of capital goods—nonelectrical machinery (excluding computers, peripherals, and semiconductors) and transportation equipment (excluding motor vehicles)—posted annual increases of 0.4 percent and 3.1 percent, respectively. As with their import counterparts, higher input costs and foreign currency effects contributed to the increases.[16]

Consumer goods. After falling 0.6 percent in 2002, prices for consumer goods rose 0.6 percent in 2003, as each subcategory of the consumer goods price index increased. Increases in the price indexes for household goods, for medicinal, dental, and pharmaceutical preparatory materials, and for recreational equipment more than offset modest price declines for apparel and footwear and for home entertainment equipment.

Automotive vehicles, parts, and engines. The price index for exported automotive vehicles, parts, and engines increased 0.5 percent in 2003. Domestic automakers faced higher costs for raw materials such as steel and rubber. Canada and Mexico are the largest markets for U.S. cars, trucks, and parts. Although up slightly in 2003, auto exports to Canada remain somewhat below 2000 levels. The volume of auto exports to Mexico dropped by more than 10 percent in 2003 and was nearly 18 percent below 2000 levels.[17]

Services. The price index for export air passenger fares, a measure of changes in foreign travel fares paid to foreign carriers by U.S. residents, recorded an increase of 14.7 percent in 2003. During the first half of the year, the airline industry faced increases in jet fuel costs and a downturn in demand due to Middle East tensions and the outbreak of severe acute respiratory syndrome (SARS). In general, seasonal price changes tend to dominate the industry. The price index for export air freight, a measure of changes in rates paid for the transportation of freight from the United States to foreign countries on U.S. carriers, increased 0.2 percent last year, as adjustments to fuel surcharges led to increased prices in the early part of the year, followed by small declines thereafter. □

Notes

[1] Annual percent changes are calculated from December to December, unless otherwise specified. Data are not seasonally adjusted.

[2] Federal Open Market Committee Statement, May 6, 2003.

[3] The 2003 import and export price indexes are based on trade dollar values for the year 2000. Beginning with the January 2004 import and export price indexes, the Bureau has been updating its weights on an annual basis, with, however, a 2-year lag.

[4] See "A copper-bottomed boom?" *The Economist*, Oct. 2, 2003.

[5] *Fact Sheet* (U.S. International Trade Administration, Jan. 27, 2004).

[6] *New Residential Construction* (U.S. Census Bureau, December 2003).

[7] *NAWLA Bulletin* (North American Wholesale Lumber Association, Sept. 22, 2003).

[8] See "Surging rubber prices put exporters in risky situation" (Thailand Department of Export Promotion, Nov. 10, 2003); on the Internet at **http://www.thaitrade.com/exportnewssurging.shtml**.

[9] See "Asia Has Chipmakers Cheering," *Business Week*, Dec. 8, 2003.

[10] FRED (Federal Reserve Economic Data) II, database maintained by the Federal Reserve Bank of St. Louis.

[11] See "Dollar's Decline Has Little Impact on Import Prices," *The Wall Street Journal*, Jan. 14, 2004; and "A faded green," *The Economist*, Dec. 6, 2003.

[12] See "Shipping prices move into the fast lane," *The Wall Street Journal*, Nov. 6, 2003.

[13] *Cotton: World Markets and Trade* (U.S. Department of Agriculture, Foreign Agriculture Service, March 2004). The percent change in Chinese imports was calculated on the basis of the cotton season from August 2002 to August 2003.

[14] *Oil Crops Yearbook* (U.S. Department of Agriculture, Economic Research Service, Oct. 22, 2003).

[15] See "Beyond the bubble," *The Economist*, Oct. 9, 2003.

[16] Although most transaction prices collected by the Bureau are in U.S. dollars, some prices are reported in a foreign currency, and those prices must be converted into U.S. dollars for use in price index calculations. Currency fluctuations directly affect export prices when foreign-currency-based transactions prices are converted into U.S. dollars. Economic theory suggests that currency fluctuations should indirectly affect both import and export prices over time, depending on several factors, such as the magnitude and duration of the fluctuation, the nature of the industry for which the particular good is being priced, and the general state of the global economy.

[17] Product trade data were obtained from the Foreign Trade Statistics Division of the U.S. Census Bureau.

Declining union density in Mexico, 1984–2000

Since the mid-1980s, Mexico has witnessed a significant decline in unionization; changing industry, occupation, and demographic worker characteristics account for only about one-fourth of the decline, while structural and institutional changes account for three-fourths.

David Fairris
and
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Unions have experienced membership setbacks in a number of countries since 1984. In Mexico, union density has declined for the labor force as a whole, and also across a wide spectrum of industries and occupations. Only a small proportion of the decline is accounted for by changes in industry, occupation, and demographic characteristics. Most of the decline is attributable to the changing structural/institutional context within which unions organize new workers and retain existing members, which could include, for example, changing government policies and increasing employer resistance to unions.

This article examines the union density situation in Mexico, using individual workers' responses to a nationally representative series of household surveys. This approach allows *active* union representation to be measured. Workers who self-report being union members are less likely to be a party to protection contracts — that is arrangements in which employers pay unions a fee (often unbeknownst to workers) for explicitly failing to represent labor's interests at the worksite. Labor scholars have argued that protection contracts have been on the rise in recent years in Mexico.

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The data

This article derives weighted estimates of the proportion of the labor force affiliated with a union for various years from 1984 to 2000, both in the aggregate and by industry, occupation, and proximity to the border with the United States. Data are from the National Survey of Household Income and Expenditures (Encuesta Nacional de Ingresos y Gastos de los Hogares — or ENIGH) — a national sample of households, stratified by population size of locality, with sampling weights that make estimates drawn from the sample nationally representative.[1] The data contain a number of useful worker characteristics, including whether workers are affiliated with a union in their principal job, their monthly pay and average weekly hours worked at this job, their industry and occupation, educational level, and demographic characteristics such as age and gender. To make meaningful inter-temporal comparisons, this article uses detailed industry and occupation categories that are consistent across all years.[2]

Restricting the sample in a number of ways ensures the reliability and meaningfulness of the estimates, and particularly the union/nonunion comparisons. This study excludes workers under age 16, those who did not work at all in the month prior to the date the survey was taken, the self-employed, business owners, and those working for cooperatives, working for family businesses, or working without compensation. Also excluded are workers with more than one

job, because information is available on union status only for the primary job in 1984 and 1989. Certain sectors (farming, livestock, forestry, hunting, and fishing) and certain occupations (domestic servants, vendors with no fixed or stable establishment, and agricultural occupations) that are traditionally "beyond the pale" of unionization in Mexico are also excluded; workers in these sectors and occupations are typically considered part of Mexico's "informal" — that is, unregulated — labor force.[3]

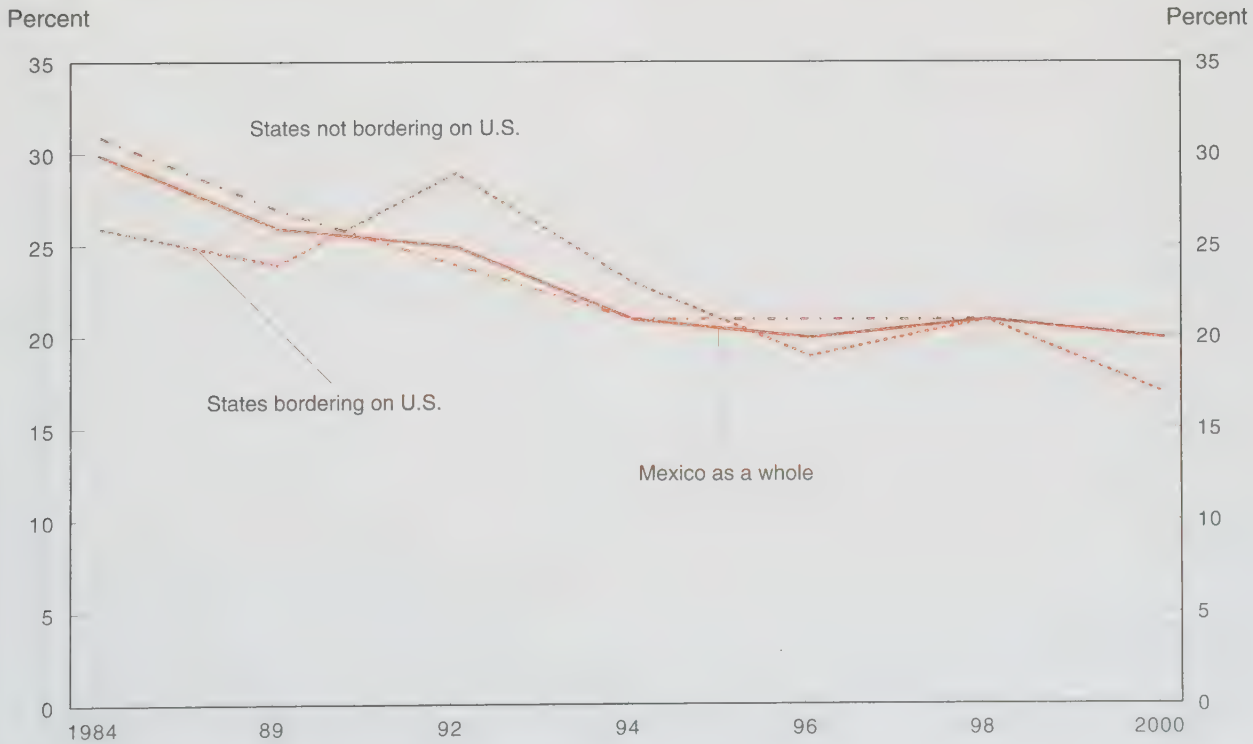
Changing union density

For the "formal" sector labor force as a whole, union density declined from just over 30 percent in 1984 to just under 20 percent in 2000. (See chart 1.) (If the "informal" sector workers are included, the numbers are 26 percent and 17 percent respectively.[4]) The biggest and steadiest decline was a 9-percentage-point decline from 1984 to 1994, with an approximate leveling-off thereafter. The trend is geographically similar if considering only those states that do not share a border with the United States. The trajectory for the border states is more variable, beginning at 26 percent in 1984, initially dropping slightly and then spiking to 29 percent (above the national level of 25 percent) in 1992, and following a similar pattern as (but declining faster than) the national trajectory thereafter.[5] For most of the period studied, union density along the border was lower than in the interior, and thus rapid job growth in this region of the country might be expected to contribute to the aggregate decline in unionization.

Interestingly, unionization generally declined across all sectors. (See chart 2.) By far the most dramatic is the sharp and steady decline in union density in the transportation, mail, shipping, and warehousing sector, a 38-percentage-point drop over this period. The mining, electricity, water, and gas transmission industry also experienced a rather significant (14-percentage-point) decline in union density early in the period, between 1984 and 1994, but witnessed a large spike from 1996 to 1998 and a sharp drop again between 1998 and 2000, arriving at 47-percent union density by the end of the decade. Union density declined 10 percentage points in manufacturing, 8 percentage points in the service sector, and 5 percentage points in the commercial sector. The construction sector, after a substantial increase to 9-percent union density by 1989, then dropped 7 percentage points over the 1990s.

By the year 2000, the mining, electricity, water, and gas

Chart 1. Union density in Mexico as a whole, and by proximity to U.S. border, 1984–2000



transmission sector was still, by far, the most unionized sector, with 47-percent union density, and the commercial and construction sectors continued to have, by far, the lowest union density, at merely 3 percent and 2 percent, respectively. Among the three sectors in the middle, transportation, mail, shipping, and warehousing went from the top to the bottom position, and services remained well above (by 10 percentage points) manufacturing, but both still with substantial union densities of 29 percent and 19 percent, respectively.

Education workers (that is, teachers at all levels of instruction) are by far the most highly unionized occupation in Mexico, with an initial union density of 73 percent and an 8-percentage-point decline in union density between 1984 and 2000. (See chart 3.) Technicians maintained a distant second place despite a 21-percentage-point decline. Just beneath teachers and technicians is a large cluster of other occupations, all showing a general declining trend over the period, ranging between 19 percent and 35 percent union density in 1984, and ending between 8 percent and 23 percent union density in 2000. Again, the general trend among these two occupations was a period of steepest decline in the 1980s and early to mid-1990s, with a tendency to level off or even recover slightly thereafter, and then sometimes drop slightly again from 1998 to 2000. An interesting exception is the case of professionals, who saw a steady rise in union density from 1984 to 1994, and a steady decline thereafter.

Sample sizes become small, and density estimates therefore become less reliable, in the analysis of more detailed industry categories. However, to give a sense of the overall tendency of the entire period, table 1 shows the union density for more detailed industry categories at the beginning and end of the period. A similar, downward-trending trajectory of union density is seen in almost every case, though not without notable exceptions.

An in-depth, institutional analysis of each sector would offer specific insights into the move towards lower unionization rates. For example, Mexico's declining unionization in the transportation, mail, shipping, and warehousing sector may be partly accounted for by the deregulation of the industry and the tremendous growth of private shipping services, which typically lack active unions. These changes may not only have increased the number of nonunion jobs in the sector, but also simultaneously, by displacement, caused a reduction in the absolute numbers or growth of jobs in the more heavily unionized, public shipping sector. However, the existence of a secular decline across almost every industrial

Chart 2. Union density by major sector, 1984–2000

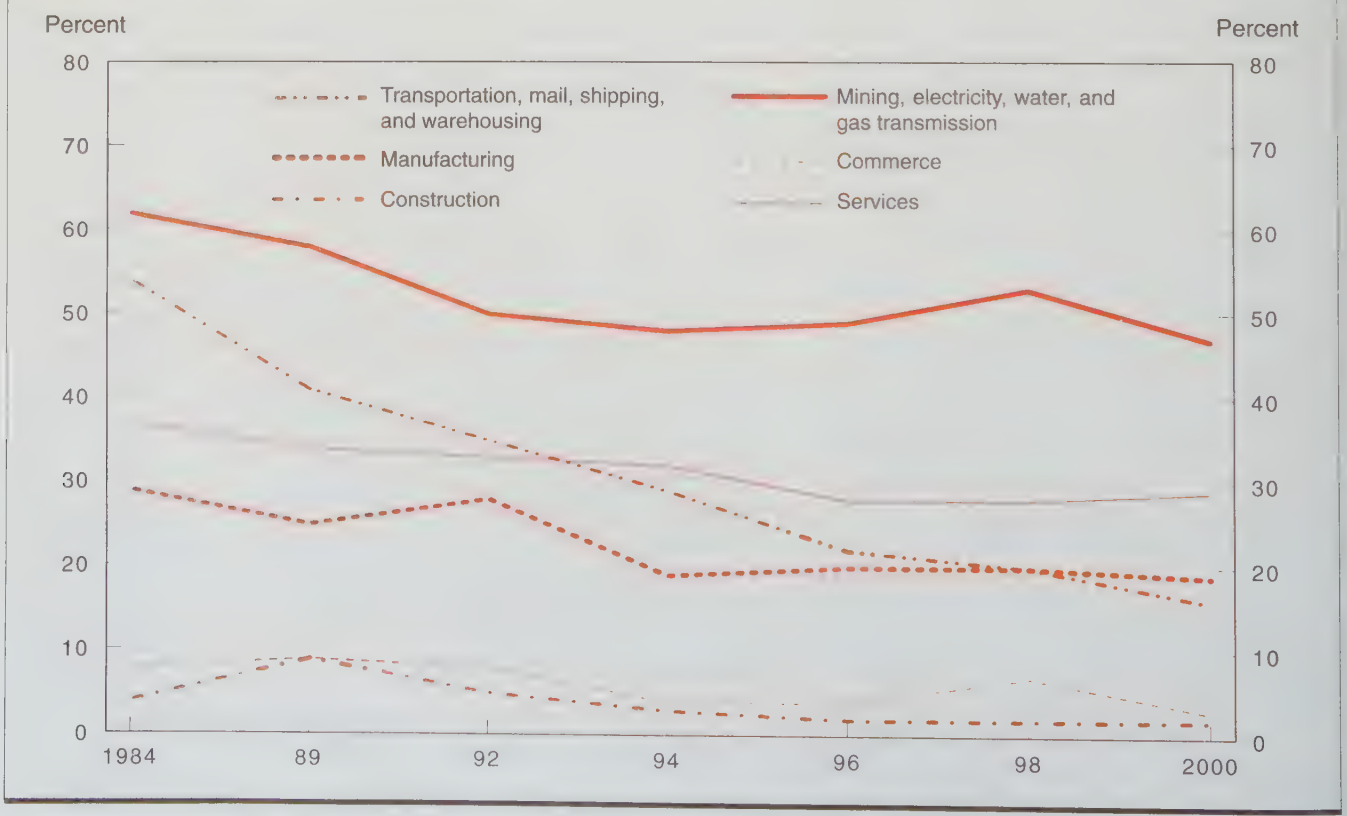


Chart 3. Union density in selected occupations, 1984–2000

Table 1. Union density by detailed industry category, 1984–98

Industry category	Year	
	1984	1998
Mining and petroleum extraction	0.50	0.49
Food products, beverages, and tobacco	.35	.18
Textiles, apparel, and leather products	.28	.16
Wood and wood products	.12	.12
Paper, paper products, and printing	.19	.16
Chemical substances, petroleum and coal derivatives, plastics, and rubber	.43	.28
Non-metallic mineral products (excluding petroleum derivatives)	.21	.14
Basic metal industry	.50	.26
Metal products, machinery, and equipment	.27	.25
Other manufacturing industries	.32	.13
Electricity, water, and gas transmission	.65	.57
Construction	.04	.02
Wholesale commerce	.11	.08
Retail commerce	.08	.06
Restaurants and hotels	.09	.09
Transportation and communications	.54	.20
Insurance and financial services	.33	.20
Real estate leasing and administration	.00	.00
Other services	.15	.06
Public administration, defense, and health	.37	.29
Education, research, social service doctors, and civil and religious associations	.65	.57

and occupational category suggests that there is an underlying, systemic explanation for the general decline of unionization in Mexico.[6]

Accounting for the decline

The decline in union density may be the result of two broad forces. On the one hand, rates of unionization may change due to changes in the industrial, occupational, or geographical composition of jobs in the economy, or to changes in the education, age, and gender composition of workers in the labor force ("compositional changes"). Alternatively, the decline in union density may be the result of systemic institutional changes, such as changing support for unions by government actors or a changing desire for, or resistance to, unions by workers or employers ("institutional changes").

The success of the labor movement in Mexico has been linked historically to its alignment with the Institutional Revolutionary Party, which held power for most of the 20th century.[7] State and federal labor authorities can exert substantial influence over both the union registration process and contractual relations between unions and employers. Beginning with the shift in Mexico's development strategy in the 1980s, unions fell into disfavor among influential members of the Institutional Revolutionary Party. As a consequence, union organizing and maintenance of membership may well have become more difficult in the 1980s and 1990s.

The authors have found no direct evidence for decreased union support among Mexican workers during this period. If the ability of unions to win key contract demands had decreased, this might have led to diminished support for unions among workers; however, in separate analyses, little evidence was found of changing union relative wage effects over the period, and only a moderate, but significant, reduction in the ability of unions to standardize wages and level the wage structure through collective bargaining.[8]

The growing prevalence of protection contracts and "ghost unions" cited by labor scholars in Mexico suggests that, in recent decades, employers may have become less willing to deal with workers as an organized force, and more effective at co-opting the formal structure of unions to avoid having to deal with organized workers. Thus, there is at least some evidence to suggest that unions are facing greater difficulty in organizing new members and perhaps retaining existing members in recent years.

To begin an exploration of the relative importance of "institutional changes" versus "compositional changes" in accounting for the decline in union density over this period, table 2 shows the changes in both union density and employment share by industry, occupation, demographic and human capital characteristics, and geographical categories. In nearly every category, union density declined, and typically by large amounts — between 5 percentage points and 15 percentage points or more; this suggests that a change in the overall institutional climate for organizing and retaining union members is likely to be responsible for declining union density.

Further evidence against the importance of compositional effects is found in a second feature of the results. Holding union density constant at 1984 levels, the direction of some of the compositional changes is consistent with a decline in union density, but the direction of others suggests a rise in union density. For example, the share of employment in the highly unionized mining, electricity, water, and gas industry declined by 2 percentage points, thereby suggesting a decline in overall union density; however, the moderate-union-density services sector saw its share of employment rise by 3 percentage points, tending to produce the opposite effect. Similarly, the shift in employment in favor of border states would account for some of the decline in union density, as would, in general, the shift in employment away from the capital zone, yet the shift in favor of urban areas points to an increase in union density, as does the shift in favor of female employment. Thus, while the examination of these descriptive statistics makes clear the importance of the decline of within-group union density in accounting for the overall decline in union density, the case for "compositional changes" is weaker, and ultimately inconclusive on the basis of these descriptive tables.

In separate research, the changing union density over this period is decomposed into "institutional" and "compositional" forces following the statistical technique found in

Table 2. Change in union density and employment share by industry and occupation, demographic and human capital characteristics, and geographical classifications, 1984–98

Characteristics	1984		1998		Change, 1984–98[1]	
	Union density	Employment share	Union density	Employment share	Union density	Employment share
Industry and occupation						
Total	0.30	1.00	0.21	1.00	–0.09	0.00
Industry (aggregate)						
Mining, electricity, water, and gas transmission	.62	.04	.53	.02	–.08	–.02
Manufacturing	.29	.26	.20	.26	–.09	.00
Construction	.04	.10	.02	.08	–.02	–.02
Commerce	.08	.14	.07	.16	–.02	.02
Transportation, communication, shipping, and warehousing	.54	.07	.20	.05	–.33	–.02
Services	.37	.39	.28	.42	–.09	.03
Occupation						
Technicians	.47	.05	.37	.05	–.10	.00
Education workers	.73	.05	.64	.06	–.09	.00
Arts, performance, and sports workers	.73	.01	.13	.01	–.60	.00
Functionaries and directors	.21	.03	.13	.03	–.09	.00
Supervisors	.35	.03	.19	.03	–.16	.00
Direct workers and industrial	.30	.27	.20	.23	–.10	–.04
Assistants, artisanal, and industrial	.19	.09	.09	.11	–.10	.02
Department managers, supervisors in administrative/ service sectors, and administrative workers	.32	.19	.25	.17	–.08	–.02
Merchants, commercial employees, and sales agents	.08	.08	.05	.11	–.03	.02
Personal service providers in fixed establishments	.27	.09	.19	.09	–.08	–.01
Conductors and assistant conductors	.23	.05	.15	.05	–.08	.00
Workers in protection, security, and Armed Forces	.27	.02	.16	.04	–.11	.01
Professionals	.13	.02	.21	.04	.08	.01
Demographic and human capital						
Sex						
Female	.38	.30	.25	.34	–.12	.04
Male	.27	.70	.18	.66	–.09	–.04
Age (in years)						
16–25	.22	.34	.10	.33	–.12	–.02
26–35	.30	.33	.21	.32	–.09	–.01
36–45	.42	.18	.31	.20	–.11	.02
46–55	.35	.10	.31	.10	–.03	.00
56–65	.41	.04	.25	.04	–.16	.00
66–75	.16	.01	.07	.01	–.08	.00
75 and older	.00	.00	.15	.00	.15	.00
Highest level of education completed						
None	.21	.23	.11	.13	–.10	–.11
Primary	.30	.33	.16	.24	–.15	–.09
Secondary	.31	.24	.21	.34	–.09	.10
Preparatory	.42	.12	.25	.18	–.17	.06
College	.40	.07	.32	.10	–.08	.03
Graduate	.12	.00	.46	.01	.34	.01
Geographic classifications						
States not bordering the U.S.	.31	.81	.21	.80	–.11	–.01
States bordering the U.S.	.26	.19	.21	.20	–.05	.01
North-West[2]	.19	.09	.19	.09	.00	.01
North	.29	.08	.21	.09	–.09	.01
North-East	.30	.09	.28	.09	–.02	.00
Center-North	.28	.08	.15	.09	–.13	.01
West	.27	.10	.22	.11	–.05	.02
Center	.26	.06	.24	.08	–.01	.02
Gulf-Center	.39	.05	.23	.07	–.16	.02
Pacific-South	.24	.03	.24	.04	.00	.01
Yucatan Peninsula	.26	.03	.23	.03	–.02	.01
Capital Zone	.34	.39	.18	.18	–.16	–.21
Rural (population less than 2500)	.25	.14	.12	.07	–.13	–.07
Urban (population greater than or equal to 2500)	.31	.86	.21	.93	–.10	.07

[1] Figures for changes do not always equal the difference in reported levels due to rounding.

[2] Regional definitions are those used in Fernando Herrera and Javier Melgoza, "Evolución Reciente de la Afiliación Sindical y la Regulación Laboral en México," in Enrique de la Garza and Carlos Salas, eds., *La Situación del Trabajo en México, 2003* (Mexico City, Plaza y Valdés, 2003) and are as follows: **North-West**: Baja California Norte, Baja California Sur, Sinaloa, and Sonora; **North**: Chihuahua, Coahuila, and Durango; **North-East**: Nuevo León and Tamaulipas; **Center-North**: Aguascalientes, Guanajuato, Querétaro, San Luis Potosí, and Zacatecas; **West**: Colima, Jalisco, Michoacán, and Nayarit; **Gulf-Center**: Veracruz and Tabasco; **Pacific-South**: Chiapas, Guerrero, and Oaxaca; **Yucatán Peninsula**: Campeche, Quintana Roo, and Yucatán; **Capital Region**: Federal District (D.F.) and Mexico State.

Due to an ambiguity in coding, it was not possible to classify 12 percent of employees by region in 1998. Thus, the shares of employment by region do not sum to 1 for that year. The shares follow a similar pattern when the unclassified workers are removed from the sample.

Henry S. Farber's analysis of the decline in union density in the United States.[9] In particular, the 1984 data is used to estimate a union status probit regression with the following explanatory covariates: a set of 20 industry and 12 occupation categorical variables, age, age squared, a gender dummy, a set of categorical variables indicating level and type of educational attainment (including technical school), an indicator for location in a rural or urban zone, and an indicator variable for whether the person lives with 1 or more family members who are in a union.

The estimated coefficients from this regression represent the difficulty or ease that unions experienced in organizing and retaining union workers in 1984, and thus reflect the institutional context within which unions operated during the period. Substituting the individual characteristics, industry, occupation, and geographical information on workers from the 1998 data into the 1984 estimated probit regression, union density in 1998 can be predicted under the counterfactual assumption that the institutional context for union organizing remained the same in 1998 as it was in 1984. The difference between this "counterfactual" union density and the actual 1984 union density is then interpreted as that part of changing unionization from 1984 to 1998 accounted for by compositional changes in the various job and labor force characteristics.[10] The difference between the actual 1998 union density and this counterfactual measure gives the part of the change from 1984 to 1998 accounted for by institutional changes.[11]

The results of this exercise are as follows:

	Year	
	1984	*1998*
Actual union density	0.303	0.208
Counterfactual union density using 1984 coefficients	–	.280

Based on this analysis, of the 9.5-percent decline in union density in Mexico, the change in industry, occupation, and demographic composition explains only 2.3 percentage points, while changes in the estimated coefficients of the model explain 7.2 percentage points. In other words, slightly less than one-fourth (24 percent) of the decline in union density is due to changes in job and labor force compositional characteristics, while just over three-fourths (76 percent) of it is due to structural and institutional changes in the ability of unions to organize and retain members.

TRAJECTORIES OF UNION DENSITY — in the aggregate and by industry, occupation, and proximity to the border with the United States — reveal that, in nearly every category, Mexico has experienced a substantial decline in unionization since 1984. For the formal sector labor force as a whole, the decline is from 30 percent to 20 percent — a fall of about one-third. Moreover, changing industry, occupation, and demographic worker characteristics account for only about one-fourth of this decline; the remaining three-fourths are accounted for by structural and institutional changes in the ability of unions to organize and retain workers. □

Notes

ACKNOWLEDGMENT: We acknowledge the helpful comments of Alejandro Covarrubias, Fernando Herrera and Armando Rendón, and the able research assistance of Gurleen Popli. We thank David Card for suggesting that we conduct this analysis, and the Institute for Labor and Employment at the University of California for financial support.

[1] INEGI. *Encuesta nacional de ingresos y gastos de los hogares, 1989, 1984.* (Aguascalientes, Mexico, Instituto Nacional de Estadísticas, Geografía e Informática, 1992). ——. *Encuesta nacional de ingresos y gastos de los hogares, 1992, 1994, 1996.* (Aguascalientes, Mexico, Instituto Nacional de Estadísticas, Geografía e Informática, 1998). ——. *Encuesta nacional de ingresos y gastos de los hogares, 1998, 2000.* (Aguascalientes, Mexico, Instituto Nacional de Estadísticas, Geografía e Informática, 2000).

[2] Because of the change between 1998 and 2000 in the industrial classification system in Mexico (from the Clasificación Mexicana de Actividades y Productos or CMAP to the Sistema de Clasificación Industrial de América del Norte or SCIAN [NAICS in English]), it was not possible to make the detailed industry categories for 2000 consistent with those of previous years. Thus, for comparisons between 2000 and previous years, we rely on more aggregate industry categories.

[3] Certain of these exclusions are similar to those used by Fernando Herrera and Javier Melgoza to construct a sample representing the "unionizable population of the industrial sector" (PSSI representing the name in Spanish). See Fernando Herrera and Javier Melgoza, "Evolución Reciente de la Afiliación Sindical y la Regulación Laboral en México," in Enrique de la Garza and Carlos Salas, eds., *La Situación del Trabajo en México, 2003* (Mexico City, Plaza y Valdés, 2003). However, they further restrict their PSSI sample to the industrial sector, arguing that the service sector has enjoyed high and relatively stable union density in Mexico. (Our estimates below measure the degree of that relative stability.) They also, usefully, analyze trends in both the economically active population (PEA) and the PSSI, raw numbers of unionized workers and union densities, overall and by gender, age group, region, industry, and occupation, as well as both raw numbers of unionized workers and union densities for both the PEA and the PSSI.

[4] The informal sector is a large percentage of the labor force in Mexico – some estimates put it at 40 percent or more – but many of these workers are properly classified as self employed. Focusing, as we do here, on wage and salary workers, inclusion of the informal sector does not change the numbers by very much.

[5] This spike in border-state union density is curious. However, the 1992 union density for the border states is indeed statistically significantly greater than that for Mexico as a whole. Nor does it appear to be the result of any sudden change in the level of employment in the border states, as employment in the region has risen fairly steadily over the entire period.

[6] Herrera and Melgoza, "Evolución Reciente," analyze the trends in unionization between 1995 and 2000 in terms of changes in regulation

governing the organization of work, introduction of new technologies, subcontracting and casualization of labor. A number of other articles in the same volume provide useful, institutional analyses of the trends presented here.

[7] See Kevin J. Middlebrook, *The Paradox of Revolution: Labor, The State, and Authoritarianism in Mexico* (Baltimore, The Johns Hopkins University Press, 1995).

[8] See David Fairris and Edward Levine. Forthcoming. "La Disminución del Poder Sindical en México," *El Trimestre Económico* 71(4), Number 284, Oct.-Dec. 2004 and David Fairris, "Unions and Wage Inequality in Mexico," *Industrial and Labor Relations Review* 56(3), 2003, pp. 481–97.

[9] See Fairris and Levine, forthcoming and Henry S. Farber, "The Recent Decline of Unionization in the United States," *Science*, 238(4829), 1987, pp. 915–20.

[10] Following Farber, "Decline of Unionization," we use the term "accounted for" rather than "caused" in this description, because institutional and compositional forces are not necessarily independent of one another. For example, shifts in relative employment across sectors may alter the ease of organizing within the growing and shrinking sectors, respectively. Thus, we say that one factor "accounted for" a given share of the decline in union density only in the conditional sense that union density would have declined by the corresponding amount given the observed change in that factor but holding the other factor fixed.

[11] Actually, following Farber, "Decline of Unionization," we compare three predicted union densities using: (1) the 1984 coefficients and the 1984 worker characteristics, (2) the 1984 coefficients and the 1998 worker characteristics, and (3) the 1998 coefficients and 1998 worker characteristics. Because the probit model uses a non-linear functional form, (1) and (3) do not exactly correspond to the actual 1984 and 1998 union densities. However, in practice they are extremely close, and it is therefore harmless, and infinitely more intuitive to talk of the difference between the actual 1984 and 1998 values and the counterfactual 1998 value, than to talk of differences between *predicted* 1984 and 1998 values and the counterfactual 1998 value.

The diurnal pattern of on-the-job injuries

Data from two sources indicate that the injury hazard is substantially higher late at night than during regular daytime work hours; the best explanation for this finding is that work at night is dangerous, even adjusting for broad industry-occupation composition and worker fatigue

Kenneth N. Fortson

Shortly after 4:00 A.M. on March 28, 1979, mechanical equipment at the nuclear power plant at Three Mile Island, near Harrisburg, Pennsylvania, malfunctioned. In the course of responding to the emergency, operators working the late-night shift made errors that exacerbated the situation, resulting in the worst accident in the short history of U.S. commercial nuclear power.[1] Seven years later and halfway around the globe, at 1:23 A.M. on April 26, 1986, negligence by night shift workers at the nuclear reactor in Chernobyl, U.S.S.R., led to an even more catastrophic nuclear disaster.[2]

In the popular press, it is often asserted, without explanation, that workplace injuries are more common at night.[3] In the academic literature, economists have largely ignored the diurnal pattern of on-the-job injuries and, by extension, the economic ramifications. This article uses data on workers' compensation claims from Texas to estimate the empirical distribution of injuries. The results show that the injury rate is high during off-hours late at night and low during the regular nine-to-five shift.

The article also decomposes the factors causing the observed injury pattern and explores the possibility that the empirical injury cycle is merely an artifact of compositional changes in the age or industry and occupation of workers throughout the day. Late-night workers have longer shifts as well, so fatigue is examined as a possible explanation of the injury pattern. Both of these possibilities, however, are rejected as the lone explanation of the injury pattern.

Instead, the article argues that there are inherent physiological implications of late-night work that make off-hours jobs more hazardous than daytime jobs. This is an important distinction because it suggests that, in scheduling work hours, firms should consider shift *time* in addition to factors such as shift *length*, which is merely correlated with late-night work and contributes to a higher injury rate, but is not unique to night work.

Texas Workers' Compensation Commission. The Texas Workers' Compensation Commission provided data on age, time, date, and nature of injury for workers injured between 1998 and 2002. Texas was chosen because of the particularly accurate and detailed records of workers' compensation injuries maintained by the commission and because Texas has an industrial composition similar to that of the United States as a whole.[4] The 5-year time span in the data provides a large sample size, but is short enough that shifts in the industrial mix should not be a factor. The sample is a complete count of all workers who were em-

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ployed by a firm carrying workers' compensation insurance and who were injured during that period. Unlike nearly all other States, Texas does not require firms to provide workers' compensation insurance,[5] and the sample does not include those who work for firms that do not carry such insurance; however, there does not appear to be any compelling reason to believe that the diurnal injury pattern would be different among firms opting out of the workers' compensation insurance system.

In addition to furnishing data on the time of day the worker was injured and the worker's age at the time of injury, the commission provided information about the type and severity of the injury, as well as the body part injured. More than 400,000 injuries are recorded in the commission's database, of which the analysis that follows examines the 42,902 severe fractures or lacerations and the 29,074 severe falls. The primary advantage of focusing on these injuries is that they are acute and likely to be reported immediately, whereas back injuries, for example, are caused by cumulative conditions; hence, the time they are reported is somewhat arbitrary.

Current Population Survey. Data on work schedules come from the May 2001 Work Schedules Supplement to the Current Population Survey (CPS). In addition to affording data on such common factors as age, education, industry, occupation, race, and gender, the 2001 supplement provides data on when each worker's shift usually began and ended. For respondents who reported that they worked a regular work schedule, shift beginning and end times are used to determine whether a worker was at work during each hour of the day.

Workers responding to the supplement report their usual shift in two ways: by citing the usual times they start and end work and by giving categorical descriptions of the hours they work. In the latter case, they indicate whether their shift is best described as a regular daytime schedule, an evening shift, a night shift, a rotating shift, a split shift, or an irregular schedule. Of the 47,047 observations examined from the Work Schedule Supplement, 9,636 lack data on either when the shift usually began or when the shift usually ended (or both).

In order to maximize the sample size, the categorical description of the shift was used to impute the starting and ending times whenever possible. Among those who reported the starting and ending times of their shift, there was wide variation in actual schedules within the rotating shift category, as well as within the split shift and irregular shift categories. However, within the day, evening, and night shift categories, the typical starting and ending times were quite consistent. Thus, for these three types of schedule, when the individual refused to say or did not know when the shift usually started, or when the person reported that the starting time varied, his or her starting time was coded as the adjusted median starting time of those who worked the same type of shift—day, evening, or night—but *did* report their starting and ending times. An adjusted median was used because shift times are reported as the time of day (on a 24-hour clock) and simply using the median would incorrectly estimate the usual schedule for each type of shift. For example, using the median would consider midnight a very late time and 1:00 A.M. a very early time. Conceptually, however, it is usually more reasonable to consider 1:00 A.M. 1 hour later than midnight, rather than 23 hours earlier.

To get around this issue, for each of the three shifts, the 24-hour day was bisected into two 12-hour segments, one based on the shift starting time and one based on the shift ending time. Median shift times were then calculated only for those shifts with a starting time within the first segment and an ending time within the second, and the 12-hour windows were iteratively selected so as to maximize the number of observations used in the calculation for each shift.[6]

Each of the 12-hour windows was rescaled such that when the median was calculated, the beginning of the window was treated as early and the end of the window as late. The median of the rescaled windows were then used in the study. The resulting imputed shift times for those who reported working a day shift were 8:00 A.M. to 5:00 P.M.; for those who reported working an evening shift, they were 3:00 P.M. to 11:00 P.M.; and for those who reported working a night shift, they were 9:00 P.M. to 7:00 A.M. For the day and evening shifts, the shift times imputed with the use of the adjusted median are identical to the modal shift times, and the modal shift times for night shifts are very close to the adjusted median, providing additional support for the imputations. Exactly 6,849 observations were imputed in this manner; consequently, 44,260 of the original 47,047 observations in the Work Schedules Supplement could be used.[7]

Diurnal injury distribution

Table 1 reports the share of hours worked in each of the 24 time intervals. The share is computed from the Work Schedules Supplement for all workers aged 21 to 69 years and separately for each of three age subgroups. All calculations are weighted with the supplement's sample weights.

Two important features stand out. First, hours of work are heavily concentrated during the day: a full 80 percent of the share of hours worked fall between 8:00 A.M. and 5:00 P.M. Second, the distribution of hours throughout the day is remarkably similar for all three age groups. Only slightly more 21- to 39-year-olds work evening shifts than 40- to 49-year-olds and 50- to 69-year-olds, while the latter two groups work marginally more during normal business hours.

The data from the Texas commission can be used to compute the share of injuries incurred during each hour-long interval for two distinct categories of injuries: fractures and

Table 1. Share of hours worked in each hour of the day

Hour of day	Age group, years			
	21 to 69	21 to 39	40 to 49	50 to 69
24:01 to 1:00	0.006	0.007	0.006	0.005
1:01 to 2:00	.007	.007	.007	.006
2:01 to 3:00	.007	.007	.006	.006
3:01 to 4:00	.007	.007	.006	.006
4:01 to 5:00	.007	.007	.007	.006
5:01 to 6:00	.009	.009	.009	.008
6:01 to 7:00	.018	.017	.018	.018
7:01 to 8:00	.041	.039	.044	.043
8:01 to 9:00	.082	.079	.084	.085
9:01 to 10:00	.092	.090	.093	.094
10:01 to 11:00	.094	.092	.095	.096
11:01 to 12:00	.095	.093	.095	.097
12:01 to 13:00	.094	.092	.095	.096
13:01 to 14:00	.093	.092	.094	.095
14:01 to 15:00	.092	.091	.093	.094
15:01 to 16:00	.087	.087	.087	.087
16:01 to 17:00	.071	.073	.070	.070
17:01 to 18:00	.030	.032	.029	.027
18:01 to 19:00	.017	.019	.016	.016
19:01 to 20:00	.013	.014	.012	.012
20:01 to 21:00	.011	.013	.010	.010
21:01 to 22:00	.010	.012	.009	.009
22:01 to 23:00	.009	.011	.008	.008
23:01 to 24:00	.008	.008	.007	.007

SOURCE: Author's calculations from May 2001 Work Schedules Supplement of Current Population Survey. Total sample size is 44,260, including 20,125 aged 21 to 39 years, 12,761 aged 40 to 49 years, and 11,374 aged 50 to 69 years.

lacerations, and falls. These injury shares can then be weighted by the share of hours in each interval t by taking the ratio of the share of injuries to the share of hours for each age group a from the Work Schedules Supplement to obtain the injury ratio:[8]

$$\text{Injury ratio}_{at} = \left(\frac{\text{Injuries}_{at}}{\sum_t \text{Injuries}_{at}} \right) \Big/ \left(\frac{\text{Hours}_{at}}{\sum_t \text{Hours}_{at}} \right). \quad (1)$$

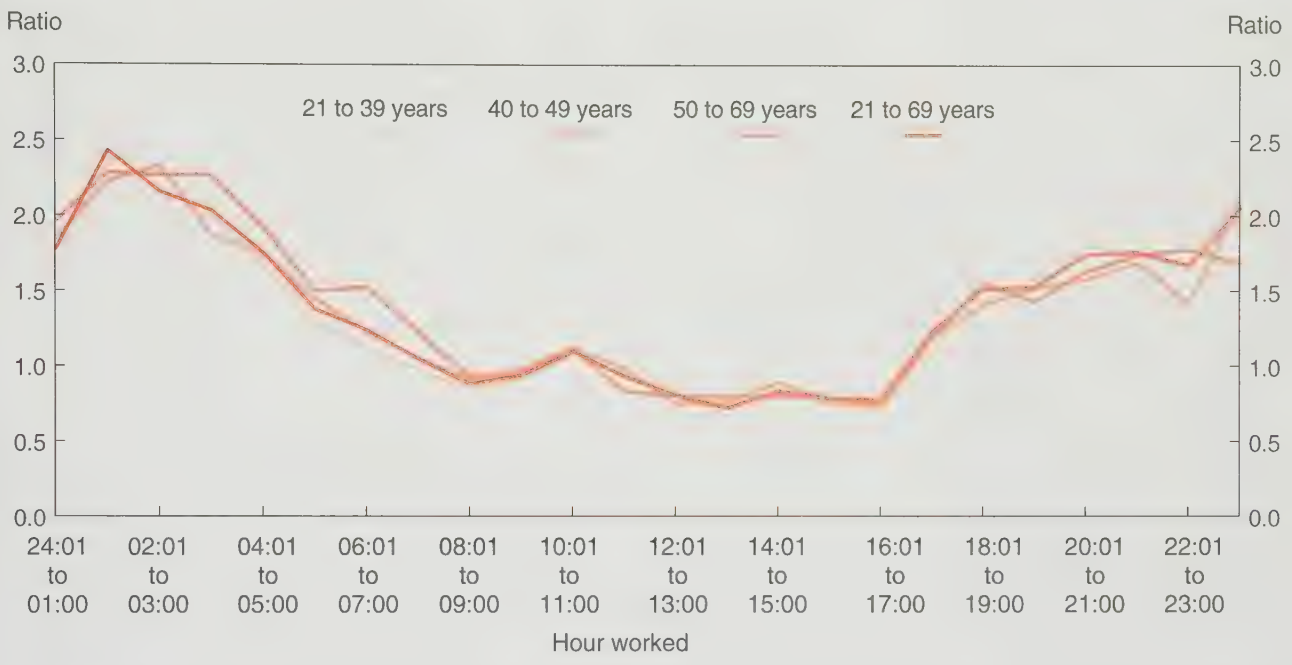
If there is a constant hazard of being injured, the ratio in equation (1) should be constant at unity across the day; that is, an increase in the share of injuries should be offset by a commensurate increase in the share of hours worked in that time interval. The results of this calculation for severe lacerations and fractures are shown in chart 1 and for falls in chart 2. Both charts demonstrate that the injury rate is far from constant. Indeed, the injury ratio is almost 3 times greater very early in the morning than it is at midafternoon. The two categories of severe injuries display similar patterns, both peaking in the 1:01 A.M.-to-2:00 A.M. hour and then steadily declining until 8:00 A.M., from which point the injury rate stays low and flat until 5:00 P.M., before gradually rising again through the evening hours.

The profiles of the three age groups in charts 1 and 2 reveal little discernible difference in injury rates between older and younger workers throughout the day, a point taken up in the next section. There is wider dispersion between the age groups in the late night and early morning hours, compared with the normal business hours of 8:00 A.M. to 5:00 P.M., but the differences are not systematic, and given the much larger number of observations used in the calculations for daytime hours, it is not surprising that there is more "noise" in the wee hours of the night.

Possible explanations

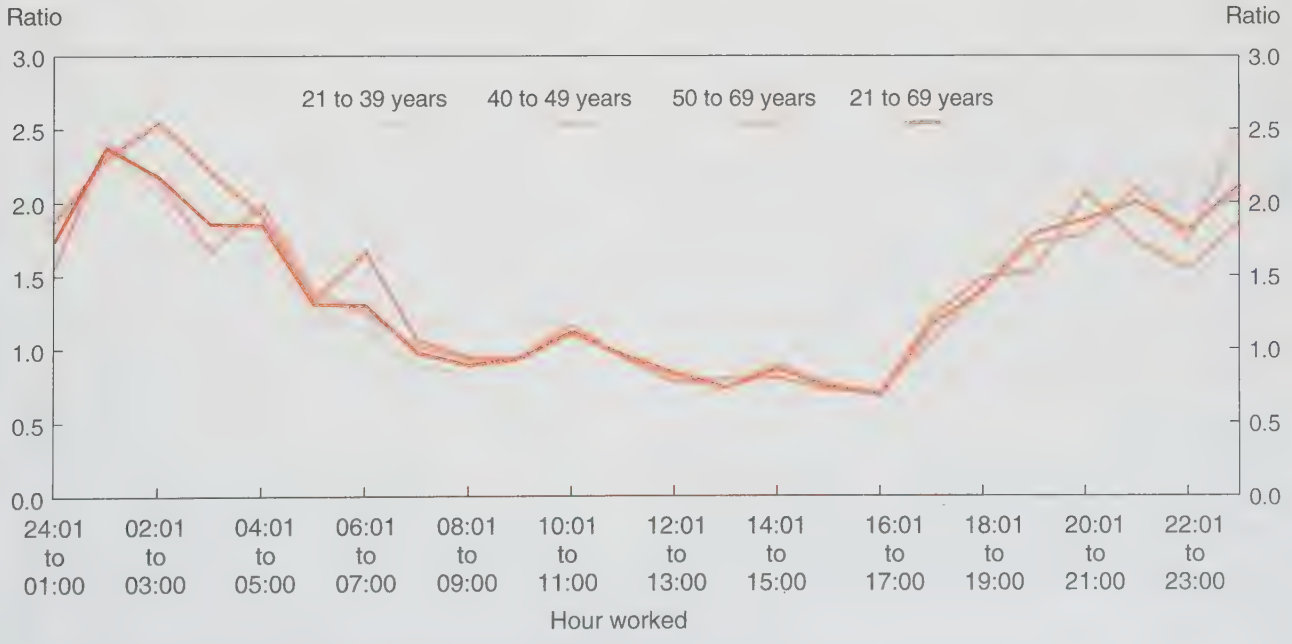
Compositional differences. In a 1996 study, Daniel S. Hamermesh found that age is negatively related to the probability of working late at night.[9] Young workers also may be more prone to injuries due to inexperience, which could drive the results. However, there is little difference in the distribution of hours across the day for the three age groups in the sample presented here, as reported in table 1 and noted in the previous section. Furthermore, as also mentioned in that section, the injury ratio patterns reported in charts 1 and 2 are quite comparable for each age group. This finding is notable because it indicates that the overall injury pattern is not driven purely by compositional changes in the age of the workforce; that is, the injury pattern is not simply an artifact of a disproportionately young and inexperienced workforce working late at night.

Chart 1. Ratio of share of lacerations and fractures to share of hours, by hour worked, all workers under 70 years



SOURCE: Author's calculations from May 2001 Work Schedules Supplement to Current Population Survey and from unpublished data from Texas Workers' Compensation Commission.

Chart 2. Ratio of share of falls to share of hours, by hour worked, all workers under 70 years



SOURCE: Author's calculations from May 2001 Work Schedules Supplement to Current Population Survey and from unpublished data from Texas Workers' Compensation Commission.

Still, there are other compositional differences that should be of concern. For one, the distribution of injuries throughout the day may be a corollary of the differential distribution of industries and occupations throughout the day. If, for example, more dangerous jobs are also more likely to have night shifts, then the composition of jobs could alone explain the dramatic increase in injuries in the hours shortly before and after midnight. Table 2 reports the broad industry and occupation of employment for those working between 1:01 A.M. and 2:00 A.M. and also for those working between 1:01 P.M. and 2:00 P.M. Note that, although the shares of blue-collar and white-collar workers are comparable in the early morning (35.7 percent and 40.5 percent, respectively), there are fewer than half as many blue-collar jobs as white-collar jobs in the afternoon (25.9 percent and 64.2 percent, respectively).[10]

To examine this phenomenon more closely, additional data on workers' compensation were extracted from the CPS March 2001 Annual Demographic Survey. For each broad industry-occupation combination, the percentage of people working in that category who received workers' compensation payments in the previous year was calculated. The percentage was then used as a measure of the injury rate in the category. Not surprisingly, there was a fair amount of dispersion across industry-occupation cells: although less than one-half of 1 percent of white-collar workers in the commerce industry (including trade, finance, and insurance) received income from workers' compensation insurance, nearly 2 percent of blue-collar manufacturing workers reported that they received workers' compensation payments. Table 2 further reveals that, in addition to being more likely to be injured, blue-collar manufacturing workers make up 19.7 percent of workers between 1:01 A.M. and 2:00 A.M., but only 7.0 percent of workers between 1:01 P.M. and 2:00 P.M. The reverse is true of white-collar commerce workers, who represent only 11.6 percent of the workers in the early morning, but 18.1 percent by the afternoon.

To test the hypothesis that these broad industries and occupations fully explain the distribution of injuries throughout the day, a weighted average of injuries throughout the day was created as follows: Let ω_i be the percentage of workers in each cell i who received workers' compensation, according to the March CPS Supplement. Let $S_{i,t}$ be the percentage of workers at each hour t of the day who were employed in cell i, according to the May 2001 Work Schedules Supplement. Then the following formula computes the share of injuries that is explained purely by differential industry and occupation injury rates:[11]

$$\text{Explained share}_t = \sum_i \omega_i S_{i,t}. \qquad (2)$$

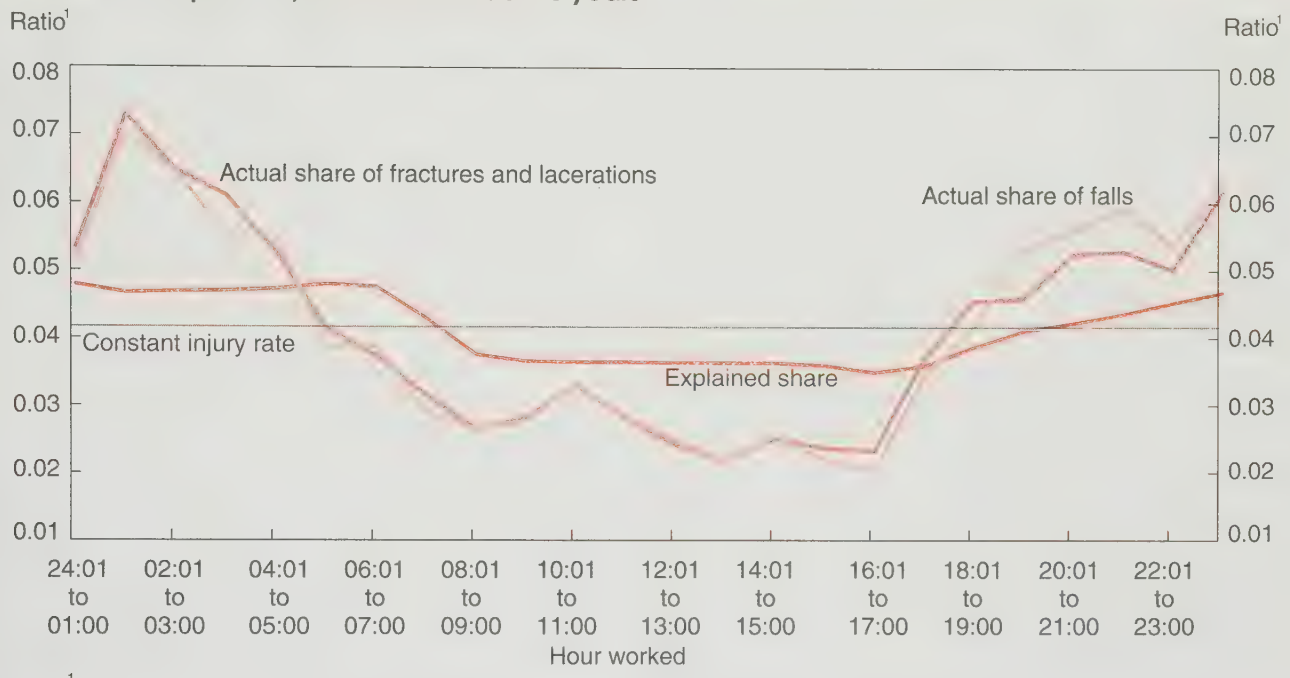
Chart 3 plots the explained injury share for each hour against both the actual share of fractures and lacerations in each hour and the actual share of falls in each hour. For comparability, the injury shares are normalized to sum to 1 throughout the day. The horizontal line through the middle of the chart, labeled "Constant injury rate," represents the hypothetical flat line that would be observed if the ratio of injuries to hours worked were constant throughout the day. The shape of the explained share curve is similar to the shapes of the actual injury rate curves, dipping below the constant injury rate during normal daytime hours and increasing above it during hours late at night and very early in the morning. Nonetheless, the magnitude of the difference between the constant injury rate and the explained share is less than half of the difference between the constant injury rate and the actual shares. In other words, compositional differences in industries and occupations throughout the day account for less than half of the diurnal variation in injury rates.

Table 2. Occupation and industry composition, 1:01 A.M. to 2:00 A.M. and 1:01 P.M. to 2:00 P.M.

Industry	Type of occupation, 1:01 A.M. to 2:00 A.M.				Type of occupation, 1:01 P.M. to 2:00 P.M.			
	White collar	Blue collar	Services	Industry share	White collar	Blue collar	Services	Industry share
Total occupation share...	0.405	0.357	0.238	1.000	0.642	0.259	0.099	1.000
Agriculture, mining, construction	.008	.036	.000	.044	.026	.088	.001	.115
Manufacturing	.030	.197	.003	.230	.068	.070	.002	.140
Infrastructure	.046	.047	.005	.098	.040	.029	.002	.070
Commerce	.116	.050	.059	.225	.181	.035	.020	.236
Services	.206	.026	.170	.403	.327	.037	.075	.440

SOURCE: Author's calculations from May 2001 Work Schedules Supplement of Current Population Survey.

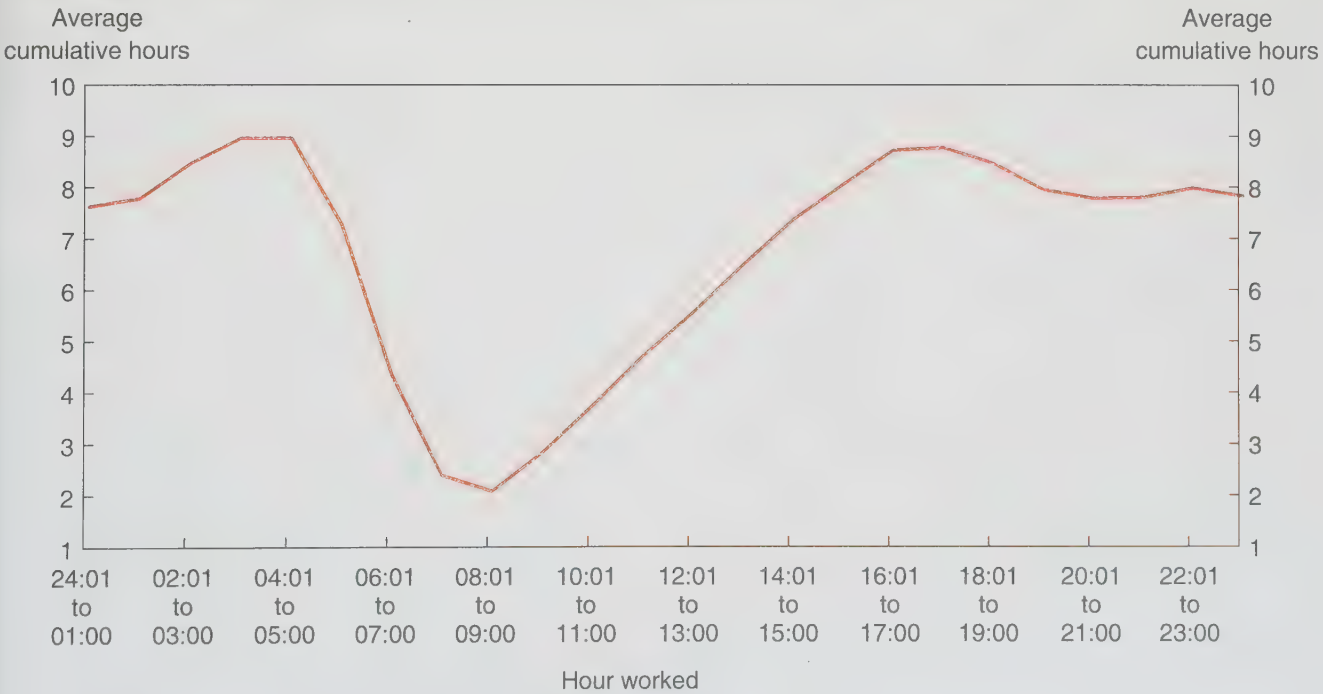
Chart 3. Actual share of injuries and share of injuries explained by industrial and occupational composition, all workers under 70 years



[1]Ratio of share of injuries to share of hours.

SOURCE: Author's calculations from May 2001 Work Schedules Supplement to Current Population Survey and from unpublished data from Texas Workers' Compensation Commission.

Chart 4. Average cumulative hours by hour worked, all workers under 70 years



SOURCE: Author's calculations from May 2001 Work Schedules Supplement to Current Population Survey.

Fatigue. One explanation for the observed diurnal injury rate pattern could be fatigue. Most of the people working between 10:01 A.M. and 11:00 A.M. have been at work for only a couple of hours, while most of those at work between 3:01 A.M. and 4:00 A.M. have been at work for much longer. Further evidence of the possibility that fatigue is a factor comes from the earlier adjusted median schedule calculations, which show that, for night workers, the typical schedule is 10 hours long, compared with 9 hours for day workers and 8 hours for evening workers. Such differences in the duration of work at each time of the day can have sizable effects on diurnal injury rates if workers are sensitive to the amount of time they spend on the job.

The relevance of fatigue can be considered by first calculating the cumulative hours worked as of each hour of the day by each worker and then taking the average cumulative hours in each hour of the day of employees working during that hour. Chart 4 displays the average cumulative hours worked for each hour (among those who are working). Although both the average duration of the shift and the injury rate dip during the day and peak at night, the shape and extrema of the shift duration plot are remarkably dissimilar to the injury patterns in charts 1 and 2. The patterns of fractures and lacerations and of falls have wide troughs bottoming out between 4:01 P.M. and 5:00 P.M. (charts 1 and 2), while the profile of average cumulative hours has a very narrow, but deep, trough that reaches its minimum between 8:01 A.M. and 9:00 A.M. (chart 4). As cumulative hours on the job rise dramatically from 8:00 A.M. to 5:00 P.M., injury rates remain low and actually decrease slightly. Given the dissimilarities between the diurnal injury patterns and the diurnal fatigue patterns, there is little evidence that fatigue is the primary factor contributing to the late-night spike in the injury rate.

Other physiological factors. Up until now, this article has discussed circumstances that are *correlated with* working a late shift, but that are not *intrinsic to* late shifts. For example, working in dangerous industries or occupations and working long hours are relatively more prevalent among workers who work night shifts than day shifts, but neither of these factors can, by itself, explain the high nighttime injury rate. However, Ed Coburn and Martin Moore-Ede argue that there are inherent characteristics of night activity that affect workers' alertness.[12] These characteristics may explain why the injury pattern has such large variation throughout the day.

A well-developed body of research in the physiology and neuroscience literature examines biological patterns known as *circadian rhythms*. These rhythms are biochemically regulated processes that generate a diurnal variation in the body's level of alertness. One recent article, for example, experimentally assesses the influence of circadian rhythms on such behavioral functions as short-term memory, reaction time, and visual vigilance.[13] In this study, the researchers scheduled episodes of sleep in such manner as to "desynchronize" circadian rhythms from the duration of wakefulness, thus independently identifying the two processes. The authors find that functional impairment peaks just after the nadir of the circadian cycle, which is observed in the early morning hours. Although each subject was evaluated intensively throughout the course of 15 to 24 repetitions of a 20-hour cycle, one limitation of the study is that it is based entirely on only six subjects. However, several related studies conducted by many of the same researchers have found similar effects of the circadian cycle on alertness. Although by no means conclusive, these experimental studies, coupled with the empirical results presented in the current article, provide strong evidence that workers are not optimally alert during night shifts, contributing to hazardous work conditions for themselves as well as their fellow employees.

THERE ARE BOTH SUPPLY-SIDE AND DEMAND-SIDE REASONS that workers might work at night. As Hamermesh notes in his 1996 book, working "unusual" times is a more usual event than we might expect.[14] He finds that women with young children often choose to work late at night, arguably because of a lack of affordable childcare during the day. On the demand side, firms can increase the productive capacity of plants by sustaining night shifts to supplement the day shifts.

However, there is a tradeoff for firms employing night shift workers. As this article has demonstrated, injuries are much more prevalent late at night than during normal business hours. The evidence presented here suggests that this difference is not simply because of compositional changes in the age or in the broad industries or occupations of late-night workers. Nor is it attributable to late-night workers having been at work longer. The failure of all of these factors to explain the higher prevalence of injuries on the late-night work shift leads to the conclusion that there are inherent features of night work that make it more hazardous than day work. □

Notes

ACKNOWLEDGMENTS: I thank Hank Farber, Jane Garrison, Alan Krueger, and participants at the Princeton Labor Lunch for many useful suggestions and discussions. Additional thanks go to Linda McKee of the Texas Workers' Compensation Commission, who provided much of the data on which this study is based. I am also indebted to the Industrial Relations Section at Princeton University and the Fellowship

of Woodrow Wilson Scholars for generous financial support. Naturally, I absolve all of the aforementioned of responsibility for any remaining errors of fact or interpretation.

[1] President's Commission on the Accident at Three Mile Island, *Report of the President's Commission on the Accident at Three Mile Island* (Washington, DC, U.S. Government Printing Office, 1979).

[2] OECD Nuclear Energy Agency, *Chernobyl—Ten Years On* (Paris, Organization for Economic Cooperation and Development, 1995); on the Internet at **www.nea.fr**.

[3] See, for example, "No More Nine-to-Five," *The Economist*, Jan. 10, 1998; and Valerie Marchant, "In the Deep of the Night," *Time*, Nov. 1, 1999.

[4] See *Current Employment Statistics* (Bureau of Labor Statistics, various years); on the Internet at **www.bls.gov**.

[5] *State Workers' Compensation Laws* (U.S. Department of Labor, January 2004).

[6] The particular windows chosen with the use of this procedure are as follows:

Day shift. Begins between 1:00 A.M. and 1:00 P.M.; ends between 1:00 P.M. and 1:00 A.M.

Evening shift. Begins between 7:00 A.M. and 7:00 P.M.; ends between 7:00 P.M. and 7:00 A.M.

Night shift. Begins between 12:00 P.M. and 12:00 A.M.; ends between 12:00 A.M. and 12:00 P.M.

[7] In a preliminary analysis, all results in this article were computed without the imputed schedules and were found to be qualitatively similar to the results obtained with imputation.

[8] Note that this formula is equivalent to taking the number of injuries per hour and multiplying by a constant that depends only on the age group. Hence, the informational content of the injury *ratio* calculation used in equation (1) is the same as that contained in the calculation of an injury *rate*, which is the number of injuries divided by the number of hours. However, because the numerator and denominator in the analysis presented here come from two separate sources, the ratio of injury shares to hour shares was calculated in order to avoid confusion and to provide a statistic with a more transparent interpretation. Because of this relationship, the remainder of the article uses the terms "injury ratio" and "injury rate" interchangeably.

[9] Daniel S. Hamermesh, *Workdays, Workhours, and Work Schedules* (Kalamazoo, MI, W.E. Upjohn Institute for Employment Research, 1996).

[10] In this analysis, executive, professional, administrative, managerial, technician, and sales occupations are considered white-collar occupations. Precision production, machine-operating, material-moving, transportation-handling and cleaning, farming, fishing, and forestry occupations are deemed blue-collar occupations, and private household services, protective services, and other services are adjudged service occupations. Industries are divided into five categories: (1) agriculture, mining, and construction, which also includes forestry and fishing; (2) manufacturing, including durable and nondurable goods; (3) infrastructure, comprising transportation, communications, utilities, and sanitation services; (4) commerce, consisting of retail and wholesale trade, finance, insurance, and real estate; and (5) services, including household, repair, personal, recreational, medical, social, educational, and other professional services.

[11] This formula is similar to calculations that Robert Shimer and, in a separate work, Lawrence F. Katz and Alan B. Krueger, used to examine how compositional differences in age and education in the U.S. workforce could account for unemployment patterns over the past three decades. (See Robert Shimer, "Why Is the U.S. Unemployment Rate So Much Lower?" in Ben Bernanke and Julio Rotemberg (eds.), *NBER Macroeconomics Annual 1998* (Cambridge, MA, MIT Press, 1998); and Lawrence F. Katz and Alan B. Krueger, "The High-Pressure U.S. Labor Market of the 1990s," *Brookings Papers on Economic Activity* (Washington, DC, The Brookings Institution, 1999), pp. 1–87.

[12] Ed Coburn and Martin Moore-Ede, "Keeping the Night Shift Alert," *Journal of Workers' Compensation*, vol. 10, no. 2, winter 2001, pp. 22–35.

[13] James K. Wyatt, Angela Ritz-De Cecco, Charles A. Czeisler, and Derk-Jan Dijk, "Circadian Temperature and Melatonin Rhythms, Sleep, and Neurobehavioral Function in Humans Living on a 20-h Day," *American Journal of Physiology*, vol. 277, October 1999, pp. R1152–R1163.

[14] Hamermesh, *Workdays*.

Accounting for wages and benefits using the ECI

Using the data set behind the Employer Cost Index to impute benefit values on the National Longitudinal Study of Youth and the Current Population Survey, this study finds that workers at the bottom part of the wage distribution exhibit a much stronger correlation between benefits and wages than those at the top

Jonathan A. Schwabish

Accounting for employee benefits as a form of real compensation for work has received much theoretical and empirical attention. The hedonic theory of compensating wage differentials, first made popular by Sherwin Rosen, contends that workers make tradeoffs between wages and benefits.[1] That is, in lieu of lower wages, workers are compensated by taking the greater benefits offered by employers. Empirical approaches to estimating the tradeoff however, have generally failed to correspond with theory. A slew of econometric difficulties are only the tip of the iceberg—unobserved worker and firm heterogeneity, measurement error, present discounted value issues (especially for pensions), and group discounts (especially for health insurance) complicate estimation. In addition, data sets often lack the necessary variables to construct and estimate hedonic models. There are few data sets that have enough variables to create such models but even fewer are nationally representative, containing employer and fringe benefit characteristics as well as employee (demographic) information. The hedonic model competes with what is commonly known as the "good jobs, bad jobs" story.[2] An observable feature of the labor market, the "good jobs, bad jobs" story asserts that workers with high wages also receive high benefits. However, perhaps *within* a job there are compensating wage differentials, which would put the hedonic and "good jobs, bad jobs" models in concert. Subsequently, workers at the bottom end of the income distribution may be forced to switch jobs in order to obtain a preferable benefit-wage mix and those at the top of the distribution may be better able to change the mix within their current job.

This study uses the Bureau of Labor Statistics' survey behind the Employer Cost Index (ECI) to impute the value of fringe benefits onto the National Longitudinal Survey of Youth (NLSY) household survey between 1990 and 1998 and formally test the hedonic theory of compensating wage differentials. As an additional check, this study performs the same procedure for the same set of years using the March Current Population Surveys (CPS). Because of concerns relating to endogeneity and measurement error—a common problem in this body of research—conclusions are generally confined to a discussion of the inequality of benefits and the degree of correlation between wages and benefits at different points in the income distribution. Although certain models

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point to compensating differentials for particular groups, these technical considerations generally lead to a discussion of correlations as opposed to tradeoffs.

In general, coefficients on health insurance, life insurance, and pensions are nontrivial and statistically significant. The sign on the benefit coefficients varies, depending upon the sample and estimation method. Pooling the NLSY observations and estimating a fixed effects model addresses the unobservable heterogeneity of workers; however, estimated coefficients are not markedly different than those from the ordinary least squares model. The CPS permits this study to have a cross-sectional approach and enables broader appeal to the model. The main contribution of the study is to utilize the BLS data in a hedonic framework. The very nature of the data permits employee benefits to enter not simply as dummy variables, as is usually done in the literature, but to enter as continuous, dollar-valued variables. The methodology continues to be troubled by endogeneity concerns but, for the time being, the ECI data sheds new light on nonwage forms of compensation and the distribution of such compensation.

The study begins by reviewing a selection of previous work in the wage-benefit literature, with particular focus on the distribution of employee benefits. It then discusses the various models used in the empirical work, and is followed by a discussion of the data itself. Summary results with decompositions of benefits and wages, and the full model results conclude the study.

Previous literature

The value of employee benefits is of increasing importance to researchers and policymakers alike. According to William Wiatrowski, total benefits make up almost 30 percent of all workers' total compensation from the employers' cost point of view.[3] An August 2001 study from the Employee Benefits Research Institute reports that employee benefits became an even greater proportion of total compensation, rising from 26.8 percent to 28.9 percent between 1987 and 1994.[4] Using Chamber of Commerce data, Masanori Hashimoto shows that between 1951 and 1994, employee costs for Social Security rose by 414 percent; workers' compensation costs increased by 66 percent; retirement costs by 76 percent; and health (and medical) insurance costs, 688 percent.[5] From the existing literature, it is clear that benefits play an important part of workers' compensation and thus the correlation between wages and benefits will have important consequences for public policy and distributional issues.

Several studies in the early 1980s attempted to estimate the *value* of benefits.[6] Additional work on hedonic price theory[7] generated mixed results from hedonic models; some negative coefficients, but not often statistically significant. Charles Brown's review article considers the research on the tradeoffs workers make between wages and job *disamenities*, such as poor working conditions, death rates, noise, heat, and so forth.[8] Brown's own empirical work (using the NLS Young Men's sample for the years 1966–71 and 1973) finds weak evidence for tradeoffs between wages and jobs that have the following characteristics:

- require employees to perform repetitive functions
- involve stressful conditions
- call for physical strength
- contain bad working conditions

Brown postulates several reasons why the hedonic model may not perform well in practice, including poorly measured job characteristic variables, omitted variable bias, and that "[l]abor markets are simply not as competitive as the theory of equalizing differences assumes." These issues continue to be challenging issues for researchers and strides are being continually made with improvements in methods and data sets.

Given the difficulties in estimating hedonic models, research in this area has spilled over into other areas of the labor market, such as mandated benefits and minimum wages. For example, Jonathan Gruber and Alan Krueger examine workers' compensation and mandated health insurance programs.[9] Arguing that looking at the tradeoff effects within entire population bias results, Gruber and Krueger select certain industries (trucking, carpentry, hospitals and plumbing) and show that employers largely shift the costs of providing workers' compensation insurance to the worker in the form of lower wages. Using variation in mandated maternity benefits as an instrumental variable, Jonathan Gruber identifies substantial shifting in benefit costs to workers.[10] Joseph G. Altonji and Christina H. Paxson investigate whether job quitters attempt to achieve more desirable benefit-wage mixes by accepting different jobs.[11] They find that workers typically demand additional compensation for jobs that offer "unattractive" hours (that is, jobs that do not permit workers to change or increase their hours). These papers are unique in the literature in that they are generally successful in finding tradeoffs between these mandated benefits and wages by using State variation in benefit laws as exogenous instruments.

Recent work has paid particular attention to the distribution of benefits and in conjunction with the wage distribution.[12] Brooks Pierce shows that wage and compensation inequality increased over the 1982–96 period, with those in the lower tail of the distribution experiencing the greatest decline.[13] Craig A. Olson uses an instrumental variables approach to estimate the tradeoff between health benefits and wages for wives who work full-time.[14] He contends that, "Husbands working in small firms or in non-union jobs are less likely to have health insurance through their jobs, and this increases the probability that their wives

have a job with health insurance through their own employers." Problems with the instrumental variable approach used in Olson's study remain: assortative mating theory and quality of benefits, conditional on firm size and union status may bias the instruments.[15]

In all, research on the tradeoff between wage and nonwage compensation has encompassed several different areas of the labor market. Researchers have used different estimation methods and different data sets to explore these tradeoffs with varying degrees of success. Although earlier studies generally failed to find such tradeoffs, later studies have taken a different view of the model with more success.[16] Focus on distribution of benefits has received new attention in papers from Brooks Pierce and from William J. Carrington and others.[17] Although the results in this article fail to precisely identify the hedonic effect, the study brings these different approaches together while taking advantage of a rich but relatively unused data set.

Data

This study uses three data sets to estimate the various models in the next sections.

Employment Cost Index. Employee benefit cost data, along with wage and salary data, come from the survey used by the Bureau of Labor Statistics to generate the quarterly price index for employer costs, known as the ECI. Quarterly micro data are available back to the early 1990s and contains hourly dollar benefit costs for common benefits including health, dental, and life insurance, defined benefit and defined contribution pension plans,[18] sick and vacation days, overtime, bonuses, shift differentials ("other pay"), and legally required benefits such as Social Security and workers' compensation. Employers are asked the cost of employee benefits by occupation within the firm. Thus, a firm may be asked the cost of health insurance and days off for, say, managers inside the firm. The survey does not include Federal, private-household, or self-employed workers.[19]

Due to attrition in the ECI and the addition of new firms to account for these losses, external employment data from the BLS Web site were used to create consistent weights within each data set and to aggregate the quarterly observations to annual data sets.[20] Using these (weighted) observations, benefit costs were calculated by averaging more than 72 industry-occupation cells for each year between 1990 and 1998.[21] These averages were then merged onto the NLSY and CPS data sets using the same industry-occupation structure. In other words, if individual *n* works in industry-occupation cell *j*, then the benefit level imputed to the individual's record equals the average (weighted) benefit level from industry-occupation cell *j* if the individual receives (or is offered) the benefit, and zero otherwise. Ultimately, the average costs calculated in the study are close to published numbers by BLS.[22]

Several aspects of the ECI made the calculations of average benefit costs especially troublesome. In particular, the survey asks for full-time, part-time status not as a function of actual hours worked, but according to the practice of the employer (that is, benefit schedules). Thus, there are many observations for which the observation is categorized as a full-time worker but worked only 20 hours in the reporting period. It is therefore difficult to distinguish between actual full-time and part-time workers within the ECI to calculate benefits. This may be important because, as has been demonstrated in previous work, part-time workers often receive fewer (if any) benefits, compared with full-time workers.[23] Full-time dummy variables—based on the individual data—are included in some specifications to control for the full-time issue. Furthermore, the benefit averages from the ECI include some observations equal to zero, which could potentially downward bias the benefit-cell averages. However, the inclusion of these zeros may help identify the interfirm trade-off of the benefits at the job level. Additionally, the external weighting scheme may further help to mitigate this potential bias.

National Longitudinal Survey of Youth. The NLSY, beginning in 1979, surveyed individuals between 18 and 25 years old. Initially, more than 12,500 individuals responded to the survey. This study uses 7 of the recent years of data; 1990–1994, 1996, and 1998 (surveys were not conducted in 1995 or 1997). The discussion in the following sections is restricted to the results in 1998, although issues of unobserved worker heterogeneity are addressed by using the panel nature of the NLSY by pooling all 7 years. The demographic variables in the models are detailed in the next section; most importantly, from NLSY data one can find whether certain benefits are made available to workers. Benefit indicators are available for most years and include health, life, and dental insurance; sick, vacation and maternity leave; retirement programs; discounts, profit sharing, and flexible hours; and other indicators such as parking, training/education and child care are also available. This study focuses on health and life insurance, sick and vacation leave, and retirement because these are also included in the ECI data.[24]

Current Population Survey. The March CPS is a familiar data set to labor economists—it surveys approximately 50,000 households every year. The CPS asks several questions about health insurance and pension coverage, but other benefits (except some required benefits) are not covered in the survey. Thus the analysis using the CPS focuses on these

two variables with the same set of demographic variables as in the NLSY (less actual work experience). The CPS is a large, cross-sectional data set and thus permits a more thorough analysis of the correlation between wages and benefits. The NLSY, however, is restricted both by the number of observations (although the average number of observations does range between 4,000 and 5,000 for the aggregate groups) and restricted age range of only 9 years.

Measurement concerns. Matching employer to employee data is becoming increasingly common and has the potential to yield large returns to research.[25] Linking these data sets however, introduces new econometric concerns as well. In the perfect world of matching employer information directly to data for their employees, measurement error and issues related to fixed effects (on several different levels) estimation are magnified in the matched data set case.[26] As Robert Elliott and Robert Sandy argue, workers who are dissatisfied with their pay may overstate workplace disamenities, and workers who are satisfied with their pay may understate the disamenities.[27] Such systematic responses to benefit surveys are shown to unambiguously bias hedonic model estimates downward. Panel data sets with matched employer-employee data would help solve some of these problems.

In the mid-1980s, a substantial literature on measurement error in this area was born. Papers by Greg J. Duncan and Daniel H. Hill, and Wesley Mellow and Hal Sider compared separate survey responses between employees and employers.[28] In the latter, the authors found that discrepancies for major industry and occupation responses were minor. Worker responses to number of hours worked tended to exceed employers' responses by about 4 percent, while their reports of wages were lower by almost 5 percent. Duncan and Hill find similar results and use the Panel Study of Income Dynamics Validation Study to show that answers to questions about benefits were relatively accurate. Error rates (percentage of workers whose responses did not match their employers) on fringe benefits were small: 1 percent on medical insurance and paid vacation days; 5 percent on dental benefits; 10 percent on life insurance; and 3 percent on pension coverage. Thus, this measurement error literature provides some evidence that the imputation procedure used in this study provides results that are not inconsistent with expected results.[29]

Given that the econometric issues related to matched data sets are not yet resolved, the imputation used in this study raises additional concerns regarding estimation. The ECI, NLSY, and CPS data sets do not make up a direct match data set but instead simply allow the imputation of benefit costs to individual demographic characteristics. General measurement issues are thus not the only concern; determining the proper matching procedure and testing for significance of the estimated coefficients is also important. First, the matching procedure may not be appropriate if one believes industry and occupation groupings do not adequately reflect employer costs. From the employer, one would expect benefits to be contingent upon other firms in that industry (and occupation) just as one would expect wages or any other form of compensation to be. The confidentiality restrictions placed on the ECI data also restricts further decomposition, such as by region, State, or even more specific industry/occupation groups.

Second, the model is estimated from within the household surveys and one might be concerned about what degrees of freedom to use in the hypothesis tests. The NLSY and CPS have about 5,000 and 55,000 observations in the 1998 sample, and the ECI has approximately 82,000 observations for the same year. Hence, in the subsequent sections, the household data sets are used as the yardstick for significance testing. The smaller number of observations is somewhat more restrictive although with these large numbers of observations, it should make little difference.

There are two other considerations that are important to the discussion of measurement error and are mentioned briefly. The first is the difference between employer cost and employee valuation. The cost of a benefit reported by the employer may differ from the value placed on the benefit by the worker. For example, if one individual in a married couple is capable of working, health insurance may have a greater value to the individuals than, say, an unmarried worker with no children. That said, while it is extremely difficult to measure the value an individual places on a benefit, the ECI data provides an easily quantifiable measure of benefits, namely the cost of the benefits to employers.[30] Second, the NLSY asks whether the respondent was offered a benefit, not whether the worker actually accepted the benefit.[31] Individuals who receive benefits were clearly offered benefits, but also realize that individuals who declined offered benefits still have a compensating differential. These differences are conceptually interesting and data on offered benefits are perhaps preferable to received benefits because receipt of benefits might miss the potential tradeoffs employees could make between benefits and wages. In that case, one would not be able to observe workers who refused such benefits and benefit packages.

Model

Three models are estimated to test the relationship between benefits and wages. After the imputation of average benefit values by industry-occupation cell, ordinary least squares, fixed effects, and quantile regression models are estimated. First, the ordinary least squares model asks what the average wage would be for the worker who has high (or low) benefits in any given industry-occupation combination. Because causality is difficult to identify, the ordinary least squares

regression results are interpreted in terms of a wage-benefits correlation arising from across-industry/occupation group averages. This is carried out using both the NLSY and CPS—the dependent variable being the logarithm of the (individual) hourly wage with both wage and benefit data inflated to 1996 CPI-U adjusted dollars.[32] Average benefit values are interacted with the individual-level dummy variables that indicate whether a benefit is offered; thus, the primary variables of interest will be equal to zero if the respondent received no benefit and a (continuous) dollar value if the respondent received the benefit. Demographic controls include age; the number of children under age 6; actual experience and its square[33]; and dummy variables for marital status, urban status, race (black and Hispanic), firm size by number of employees (0–24, 25–99, and 100 or more), full-time status (35 hours or more worked per week), union status, and education level (high school graduate, some college, college graduate). Industry-occupation dummies are included in a second set of regressions; all regressions are weighted with the individual-level sample weights.[34]

The second model exploits the panel nature of the NLSY by pooling the 1990–98 samples and estimating a fixed effects model for the same groups as in the ordinary least squares, using the same covariates as previously specified. The fixed effects regressions identify the partial correlation between wages and benefits by allowing one to look at changes in benefits and wages for a given worker. The fixed effects approach addresses the unobserved heterogeneity of workers in the sample. Concerns remain, however, of firm-level unobserved characteristics but controlling for these factors is much more difficult.

Finally, a series of quantile regressions are estimated for the 10th and 90th percentiles. Quantile regression analysis is becoming increasingly popular with the main advantage being that, like the Least Absolute Deviation (LAD) estimator, estimated coefficients are not overly sensitive to outlier data points. Quantile regressions are very different from ordinary least squares regression and is best explained by analogy: regular ordinary least squares summarizes how the mean value of the dependent variable varies with some X regressor, whereas quantile regressions summarize how some quantiles (that is, median or 10th percentile) of the dependent variable vary with some X regressor. The extreme quantile regressions and the ordinary least squares results would differ if wage dispersion were very different in high-benefit cells than in low-benefit cells.[35]

Several studies have recognized that benefit variables, when measured as dummy variables indicating the existence of the benefit, are endogenous when included in an ordinary least squares framework. (See "Previous literature" section.) Olson notes that in an ordinary least squares model, the dummy variable for health insurance "is biased, and the positive sign suggests that unobserved factors affecting wages that are correlated with [the variable] more than offset the trade-off between wages and health insurance predicted by the theory."[36] This potential endogeneity is not eliminated by using the ECI data, although the variable of interest is no longer a latent variable and is instead a continuous dollar value. In addition, the fixed effects model from the NLSY addresses some of these concerns. In light of these issues, arguing causality based on these results may be difficult; however, the negative coefficients in some regressions at least suggest a compensating differential. Combining the ECI data with the NLSY and CPS allows for a unique look at the correlations between wages and benefits that may help our understanding of the issues relating to workers' compensation. The main contribution is to take advantage of the underutilized ECI data set to explore these correlations and tradeoffs and to generate dollar-valued benefit variables rather than simple indicator variables. As will be seen later in the article, however, the models ultimately produce few negative coefficients on the benefit variables.

Subgroups. Each of the models is estimated for different subgroups of the population. The first subgroup of interest consists of individuals at the extreme ends of the income distribution—the 10th and 90th percentiles—based on the individual level hourly wage rates. As shown by Pierce, workers at the lower end of the distribution take a larger percentage of their total compensation in terms of wages than those at the higher ends of the distribution.[37] (See sections, "Summary results" and "Model results.") Hence, one might also expect workers at different points in the distribution to correlate wages and benefits differently. And, as will be seen in the following sections, the payoff from such exploration will be significant. Selection into these different components of the wage distribution however, may be an issue of concern. To address this, a series of quantile regressions (discussed earlier) are estimated with some success. A separate look at these groups may also have important consequences for policy considerations of distribution and inequality.

Estimates were also generated for several other sub-groups, but due to space constraints and the fact that the results did not shed further light on the topic, those figures are not reported here.[38] The additional subgroups include, men and women; workers earning at least 25 cents above the minimum wage; workers earning at least 50 cents above minimum wage[39]; and four "at-risk" groups including single mothers, low education youths, single fathers, and working-age black women.

Summary results

As reported by Craig Copeland, the number of employers sponsoring pension plans grew by more than 5 percentage

points between 1992 and 2000, and the number of employees participating in a plan grew from 47 percent to 52 percent over the same period.[40] Health insurance continues to be a highly valued form of compensation to workers in the United States. In 2001, 60 percent of those polled in an Employee Benefits Research Institute/Matthew Greenwald & Associates poll said health insurance was the most important benefit, followed by 23 percent saying retirement plans were the most important.[41]

Summary statistics of interest for the NLSY and the CPS 1998 samples used here (following imputation) are detailed in table 1, along with breakdowns by subgroups of interest, namely the 10th, 50th, and 90th wage percentiles. Summary statistics for other years are not dramatically different and, along with full regression results, can be obtained from the author. The summary statistics in table 1 illustrate some of the differences between the two data sets. CPS respondents earn about 50 cents less per hour and are a couple of years older than their NLSY counterparts.[42] Individuals in the NLSY are also much more likely to live in an urban area and belong to a union, although somewhat less likely to work full-time (defined as 35 hours or more per week). In terms of benefit variables, the NLSY contains a much richer set of variables although most are not included in the regression analysis. The benefit indicator variables show that NLSY respondents are somewhat more likely to be offered health insurance or pension plans, with other benefit variables included simply for reader interest.[43]

Table 2 breaks down the mean dollar values of the various benefit variables (following imputation) into the 10th, 50th, and 90th percentiles along with percentages of the total compensation. The patterns are as expected—people at the upper part of the distribution typically earn more in benefits, sometimes more than double workers at the 10th percentile. Health insurance and Social Security account for the biggest parts of the total benefit package, whereas some of the unemployment-type insurance benefits, such as supplemental and long-term disability, account for the smallest parts of total benefit compensation.

The variation in the distribution of benefits is interesting in its own right. For example, take the primary variables of interest (in table 2)—health and life insurance, and pension

Table 1. Summary statistics of the Current Population Survey and the National Longitudinal Survey of Youth, 1998

Variable	1998 CPS			1998 NLSY		
	Number of observations	Mean	Standard deviation	Number of observations	Mean	Standard deviation
Hourly wage (dollars)	55,439	15.509	6.517	4,735	16.068	6.453
Log(hourly wage)	55,439	2.470	.753	4,735	2.567	.610
Age	55,439	38.945	11.521	4,735	36.983	2.309
Black(0,1)	55,439	.118	.323	4,735	.135	.342
Hispanic(0,1)	55,439	.098	.298	4,735	.057	.232
High school graduate(0,1)	55,439	.324	.468	4,735	.436	.496
Some college(0,1)	55,439	.289	.453	4,735	.227	.419
College graduate(0,1)	55,439	.280	.449	4,735	.268	.443
Married(0,1)	55,439	.589	.492	4,735	.661	.473
Previously married(0,1)	55,439	.153	.360	4,735	.180	.384
Number of children	55,439	.237	.555	4,735	.224	.478
Urban(0,1)	55,439	.246	.431	4,735	.645	.479
Union(0,1)	11,497	.148	.355	4,584	.164	.370
Full-time[1]	55,439	.853	.354	4,735	.750	.433
Actual experience[2]	...	...	...	4,735	705.106	207.625
Benefit variables						
Health insurance(0,1)	55,439	0.606	0.489	4,735	0.812	0.391
Pension(0,1)	55,439	.631	.483	4,735	.708	.455
Life insurance(0,1)	...	...	...	4,735	.704	.457
Dental insurance(0,1)	...	...	...	4,716	.678	.467
Maternity coverage(0,1)	...	...	...	4,479	.690	.463
Flex-time(0,1)	...	...	...	4,731	.544	.498
Profit sharing(0,1)	...	...	...	4,694	.292	.455
Child care(0,1)	...	...	...	4,651	.073	.259
Number of sick days	...	...	...	4,479	23.620	63.124
Number of vacation days	...	...	...	4,602	13.748	29.888
Total number of days[3]	...	...	...	4,735	47.032	78.793

[1] Full-time defined as greater than or equal to 35 hours worked per week.

[2] Total number of weeks worked. See text, endnote 32.

[3] Includes sick and vacation days off. See text, endnote 24.

NOTE: Statistics are weighted using the CPS or NLSY individual weights.

Table 2. Average benefit values, total and 10th, 50th, 90th percentiles, Current Population Survey and National Longitudinal Survey of Youth, 1998

Panel A — CPS sample	Total		10th percentile		50th percentile		90th percentile	
Variable	Mean	Percent[1]	Value	Percent[1]	Value	Percent[1]	Value	Percent[1]
Sum	6.088	100.00	2.197	100.00	5.340	100.00	11.085	100.00
Vacations	.751	12.34	.257	11.69	.625	11.71	1.518	13.70
Holidays	.518	8.50	.189	8.59	.460	8.62	.985	8.89
Sick leave	.215	3.53	.037	1.70	.175	3.28	.395	3.56
Other paid leave	.073	1.21	.016	.73	.052	.98	.154	1.39
Shift differential	.067	1.11	.001	.05	.035	.65	.207	1.87
Nonproduction bonus	.289	4.75	.045	2.03	.213	3.99	.579	5.22
Severance pay	.027	.45	.001	.04	.019	.35	.071	.64
Supplemental unemployment	.009	.15	.000	.00	.000	.00	.014	.13
Life insurance	.054	.88	.013	.58	.047	.87	.106	.96
Health insurance	1.225	20.12	.520	23.68	1.377	25.79	1.916	17.28
Sickness and accident insurance	.037	.61	.013	.59	.028	.52	.080	.72
Defined benefit	.500	8.21	.089	4.07	.405	7.58	.926	8.35
Defined contribution	.340	5.59	.086	3.93	.258	4.82	.726	6.55
Social Security	1.006	16.53	.533	24.25	.883	16.54	1.530	13.80
Medicare	.254	4.18	.126	5.74	.209	3.92	.410	3.70
Federal unemployment insurance	.027	.44	.023	1.04	.027	.51	.035	.31
State unemployment insurance	.095	1.57	.079	3.57	.086	1.61	.123	1.11
Workers' compensation	.350	5.75	.127	5.79	.267	5.00	.642	5.79
Long-term disability	.029	.48	.005	.21	.024	.44	.050	.45

Panel B — NLSY sample	Total		10th percentile		50th percentile		90th percentile	
Variable	Mean	Percent[1]	Value	Percent[1]	Value	Percent[1]	Value	Percent[1]
Sum	6.234	100.00	2.226	100.00	5.317	100.00	11.109	100.00
Vacations	.764	12.26	.257	11.54	.625	11.76	1.518	13.67
Holidays	.527	8.45	.189	8.47	.460	8.65	.985	8.87
Sick leave	.215	3.45	.053	2.36	.154	2.90	.395	3.55
Other paid leave	.074	1.18	.018	0.79	.050	.93	.151	1.36
Shift differential	.066	1.06	.001	0.04	.036	.67	.207	1.86
Nonproduction bonus	.297	4.77	.040	1.81	.205	3.86	.579	5.21
Severance pay	.028	.45	.001	.04	.019	.35	.071	.64
Supplemental unemployment	.009	.15	.000	.00	.000	.00	.022	.20
Life insurance	.057	.92	.013	.57	.047	.88	.106	.96
Health insurance	1.250	20.06	.525	23.57	1.377	25.90	1.916	17.24
Sickness and accident insurance	.037	.59	.013	.59	.025	.48	.080	.72
Defined benefit	.513	8.22	.089	4.02	.410	7.71	.926	8.33
Defined contribution	.349	5.60	.086	3.88	.240	4.52	.726	6.54
Social Security	1.024	16.42	.533	23.93	.883	16.61	1.530	13.77
Medicare	.259	4.15	.126	5.66	.209	3.94	.410	3.69
Federal unemployment insurance	.026	.42	.023	1.02	.027	.50	.035	.31
State unemployment insurance	.098	1.58	.079	3.53	.087	1.64	.124	1.12
Workers' compensation	.379	6.08	.127	5.71	.267	5.02	.660	5.94
Long-term disability	.030	.47	.005	0.22	.024	.45	.050	.45

[1] Percent of total benefits.

[2] Called "pensions and retirements" by BLS prior to June 1995.

[3] Called "savings and thrift" by BLS prior to June 1995.

NOTE: Statistics are weighted using the CPS or NLSY individual weights. Life insurance, health insurance, defined benefit and defined contribution are primary variables of interest.

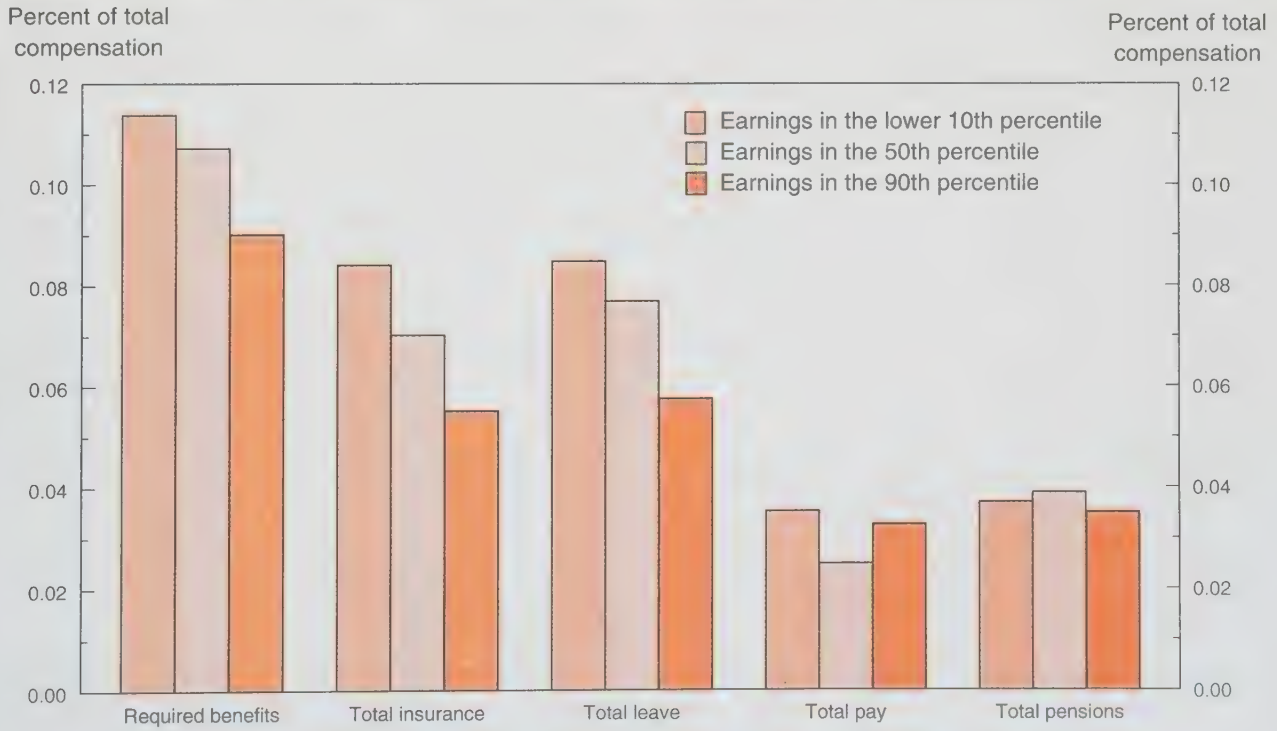
benefits (broken down into defined benefit and defined contribution plans). Health insurance clearly makes up the largest portion of total benefit compensation and is more important to those at the 10th and 50th percentiles than those at the upper tail of the distribution. Life insurance makes up less than 1 percent of benefit compensation, but is increasing through the distribution from roughly 0.5 percent for the 10th percentile to 1.01 percent for the 90th percentile. Pension benefits follow a similar pattern—those at the high end of the distribution take nearly *10 times* as much in pension benefits (around 90 cents per hour) than do those at the 10th percentile (around 9 cents per hour).

To further explore the differences in compensation across the distribution, chart 1 pictures the breakdowns in total compensation (for 1998) across the 10th, 50th, and 90th percentiles using the NLSY data set. As is clear from the chart, individuals whose earnings place them in the lower 10th percentile of the wage distribution take a higher percentage of their total compensation in the form of insurance (8 percent, including health, life, and other insurance) and leave (8 percent). Those in the upper part of the distribution however, take more in wages (72 percent versus 65 percent, not pictured) and less in required benefits (including Social Security), insurance, and leave. The differences between the percentiles are much less for total pay (including shift differential, nonproduction bonus, severance pay, and supplemental unemployment) and total pensions (including defined benefit and defined contribution). For the former, workers at the bottom part of the distribution take 3.5 percent of total compensation in the form of total pay, compared with those in the 90th percentile who take 3.3 percent. The differences are similar for pensions; 3.7 percent versus 3.5 percent. Visually, the differences in total compensation across the wage distribution are striking and, as will be shown in the following sections, estimating the correlations in an econometric model also produces different estimates across the distribution.

Model results

The most simple of the models used in this study is a standard ordinary least squares and is presented first. A fixed-effects model is estimated using the 7-year sample of the NLSY from 1990 to 1998. Finally, quantile regressions were estimated on both the CPS and NLSY to gain a better sense of what is happening within the 10th and 90th percentiles. Each model is

Chart 1. Benefits as a percentage of total compensation, National Longitudinal Survey of Youth, 1998



NOTE: Hourly wage not illustrated.

discussed in turn with some coefficient estimates converted to elasticities in order to better understand the magnitude of the regression results.

Ordinary least squares. Six ordinary least squares models are estimated for each year using the CPS and 12 ordinary least squares regressions are estimated using the NLSY—absence of the number of days off variable in the CPS accounts for the discrepancy. The base model, as noted earlier, includes 12 covariates plus the variables of interest namely, health and life insurance coverage, pension coverage, and number of days off (sick plus vacation). Additional controls include union status, full-time status, and firm size dummy variables. Each benefit variable is included separately and then together—industry and occupation dummies are included in an analogous set of regressions. The hedonic theory implies that there should be a negative coefficient on the variables of interest although in the sections that follow, positive (and statistically significant) coefficients will be the norm. These results demonstrate the degree of correlation between wages and benefits and how that correlation differs within the distribution although negative coefficients, at the minimum, suggest a compensating differential.

Tables 3 and 4 present the coefficients on the benefit variables from the 1998 ordinary least squares model results for the base models for all respondents and those below the 10th percentile and above the 90th percentile—the regressions are repeated with industry and occupation dummies and are found in the neighboring column. Panel A of tables 3 and 4 contains estimates from the whole sample and the estimated coefficients are, given the previous compensating wage differential literature, not surprising. In the regressions that do not include industry and occupation dummy variables, the coefficients are uniformly positive and are statistically significant. For health insurance, the coefficients are consistent between specifications and data sets, ranging between 0.11 and 0.22; life insurance (for the NLSY) is a bit higher with coefficients ranging between 0.24 and 0.50. Estimates for pensions differ slightly between the two data sets with NLSY point estimates ranging between 0.07 and 0.12 and coefficients from the CPS barely higher, between 0.09 and 0.14. All enter statistically significantly and the model fit (measured by the R^2) is fairly strong, ranging between 0.33 and 0.44. In the columns that include industry and occupation dummies, coefficients are uniformly smaller but of the same sign and significance.[44]

As expected—based on the previous literature—the regression coefficients on fringe benefit variables enter positively in the basic model. This is not completely surprising because we might expect that jobs with good pay would be accompanied by good benefits. The estimates in the base models for the entire population are indicative of this phenomenon with positive coefficients ranging roughly between 0.10 and 0.20 for health insurance implying nontrivial elasticities slightly larger than 0.16 for both data sets. Pension coefficients from both data sets imply a slightly smaller elasticity of around 0.08. Due to the endogeneity and measurement concerns noted earlier, conclusions regarding causality are difficult to make, although they are suggestive. On the other hand, the estimates do shed light on the degree of correlation between wages and benefits and suggest that health and life insurance are more strongly correlated with wages than pensions, a conclusion confirmed by the survey results found by the Employment Benefit Research Institute.[45]

The positive coefficients generated on the benefit variables are primarily indicative of an identification problem. Thus, although the "good jobs, bad jobs" story is not surprising (for example, CEO's have higher pay and better benefits than, say, janitors), the positive estimates in the tables imply that holding constant the set of covariates and industry/occupation dummies does not accurately hold job type constant. Note however, that workers in "good jobs" may be able to change the mix of their benefit package (for example, cafeteria-type plans) but workers in "bad jobs" may have to physically switch jobs to gain their preferred levels of wages and benefits.[46] Hence, identification of the tradeoff *within* job is not established but the *correlation* between wages and benefits is established.

Exhibit 1 (page 37) illustrates the compensating differentials theory diagrammatically with benefits on the horizontal axis and wages on the vertical axis. The isocost lines of two firms are pictured and workers' indifference curves are drawn tangent at different points to the firm's locus. For each firm, worker A prefers higher wages and fewer benefits, compared with workers B and C. If firms choose to offer wage-benefit packages so that line I is constructed, this will be the coefficient identified by the regressions in the top panels of tables 3 and 4. Similarly, if the higher wage firms offer relatively higher (lower) wages and fewer (more) benefits to their lower wage counterparts, the estimation will identify line II (III). The "hedonic line" is what these models aim to identify because the negative slope implies a tradeoff between wages and benefits. The implication of positive estimates from the model, therefore, is lack of *within job* identification. By segmenting the wage distribution into percentiles and focusing on the bottom and top deciles, we may be better able to detect those effects.

The top panels of tables 3 and 4 provide evidence for the issues discussed earlier, however, the results in the lower panels suggest otherwise. The estimates in panel B use the same models for those above the 90th percentile point in the income distribution.[47] The coefficients are *negative* and

Table 3. Regression results of benefits from the National Longitudinal Survey of Youth via ordinary least squares model, 1998

Panel A — whole sample	Equation									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Health insurance	0.151	0.142	0.149	0.140	0.139	0.124	0.116	0.101	0.110	0.090
	(.014)**	(.016)**	(.014)**	(.016)**	(.014)**	(.016)**	(.014)**	(.016)**	(.015)**	(.016)**
Life insurance	.501	0.244	.502	0.248	0.539	.306	.521	.279	.519	.274
	(.106)**	(.113)*	(.106)**	(.113)*	(.102)**	(.108)**	(.101)**	(.107)**	(.101)**	(.107)*
Pension	0.120	0.087	.117	.084	.111	.069	.113	.071	.112	.066
	(.013)**	(.013)**	(.013)**	(.013)**	(.013)**	(.013)**	(.012)**	(.013)**	(.012)**	(.013)**
Total days off	...	...	.000	.000	.000	.000	.000	.000	0.000	.000
	...	...	(.000)**	(.000)**	(.000)**	(.000)**	(.000)**	(.000)**	(.000)**	(.000)**
Constant	2.061	2.301	2.045	2.287	2.053	2.325	1.930	2.206	1.917	2.184
	(.146)**	(.147)**	(.146)**	(.147)**	(.143)**	(.143)**	(.142)**	(.143)**	(.142)**	(.143)**
Observations	4,735	4,735	4,735	4,735	4,584	4,584	4,584	4,584	4,584	4,584
R-squared	.37	.40	.37	.40	.39	.43	.40	.44	.40	.44
Panel B — 90th percentile										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Health insurance	−0.097	−0.069	−0.101	−0.072	−0.057	−0.038	−0.063	−0.044	−0.049	−0.033
	(.04803)*	(.057)	(.047)*	(.057)	(.045)	(0.056)	(.045)	(.056)	(.047)	(.056)
Life insurance	−.279	−.394	−.263	−.361	−.208	−0.279	−.221	−.300	−.216	−.293
	(.206)	(.242)	(.205)	(.240)	(.196)	(0.227)	(.196)	(.227)	(.196)	(.227)
Pension	.033	.029	.028	.027	.017	0.007	.016	.006	.017	.007
	(.029)	(.031)	(.029)	(.031)	(.028)	(0.030)	(.028)	(.030)	(.028)	(.030)
Total days off	...	...	.000	.000	.000	0.000	.000	.000	.000	.000
	...	...	(.000)**	(.000)**	(.000)*	(0.000)*	(.000)*	(.000)*	(.000)*	(.000)*
Constant	3.295	3.352	3.195	3.264	3.092	3.206	3.018	3.106	3.022	3.115
	(.538)**	(.568)**	(.535)**	(.565)**	(.491)**	(0.516)**	(.493)**	(.519)**	(.494)**	(.519)**
Observations	474	474	474	474	478	478	478	478	478	478
R-squared	0.04	0.08	0.05	0.09	0.06	0.10	.06	.11	.07	.11
Panel C —10th percentile										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Health insurance	−0.070	−0.046	−0.068	−0.047	−0.102	−0.085	−0.131	−0.119	−0.154	−0.143
	(.069)	(.074)	(.070)	(.074)	(.068)	(.073)	(.069)	(.074)	(.071)*	(.076)
Life insurance	−2.270	−1.918	−2.278	−1.912	−2.353	−2.015	−2.317	−1.980	−2.218	−1.889
	(.876)**	(.930)*	(.877)**	(.933)*	(.856)**	(.909)*	(.854)**	(.905)*	(.855)**	(.905)*
Pension	0.385	.343	.389	.342	.390	.340	.402	.349	.384	.328
	(.122)**	(.126)**	(.123)**	(.127)**	(.120)**	(.124)**	(.120)**	(.124)**	(.120)**	(.124)**
Total days off	...	...	−.000	.000	−.000	−.000	−.000	−.000	−.000	−.000
	...	...	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
Constant	1.087	.845	1.080	.846	1.161	.916	1.080	.840	1.080	.872
	(.440)*	(.484)	(.441)*	(.484)	(.444)**	(.482)	(.445)*	(.481)	(.444)*	(.481)
Observations	476	476	476	476	464	464	464	464	464	464
R-squared	.09	.14	.09	.14	.10	.14	.10	.15	0.11	.16
Industry/ occupation dummies	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Additional covariates	...	...	...	...	Union(0,1)	Union(0,1)	Union(0,1) Full-time(0,1) Firm size	Union(0,1) Full-time(0,1) Firm size	Union(0,1) Full-time(0,1) Firm size	Union(0,1) Full-time(0,1) Firm size

NOTE: Standard set of covariates include age; number of children under age 6; and indicator variables for black, Hispanic, high school graduate, some college, college graduate, married, previously married, urban residence, and actual experience. Data set—NLSY; Year: 1998; dependent variable: log (hourly wage). Standard errors in parentheses; * significant at 5 percent; ** significant at 1 percent.

statistically significant with life insurance entering the largest in magnitude. The coefficient on health insurance in the NLSY is significantly smaller than its counterpart for the whole population (table 3, panel A) and is only statistically significant in the model without additional covariates. The same holds true for the CPS sample in which the magnitude of

Table 4. Regression results for Current Population Survey via ordinary least squares model, 1998

	Equation							
Panel A —whole sample								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Health insurance	0.228	0.199	0.202	0.168	0.175	0.148	0.172	0.142
	(.004)**	(.004)**	(.008)**	(.009)**	(.008)**	(.009)**	(.009)**	(.009)**
Pension	.145	.109	.132	.089	.130	.088	.128	.080
	(.004)**	(.005)**	(.009)**	(.009)**	(.009)**	(.009)**	(.009)**	(.010)**
Constant	1.463	1.784	1.481	1.848	1.346	1.724	1.331	1.708
	(.013)**	(.019)**	(.027)**	(.039)**	(.029)**	(.041)**	(.030)**	(.041)**
Observations	55,439	55,439	11,497	11,497	11,497	11,497	11,497	11,497
R-squared	.30	.32	.32	.35	.33	.36	.33	.36
Panel B — 90th percentile								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Health insurance	−0.054	−0.058	−0.028	−0.011	−0.020	−0.005	−0.012	0.001
	(.010)**	(.011)**	(.022)	(.024)	(.022)	(0.024)	(0.022)	(0.025)
Pension	−.020	−.037	−.012	−.010	−.012	−0.009	−0.003	−0.001
	(.009)*	(.010)**	(.019)	(.022)	(.019)	(0.022)	(0.020)	(0.022)
Constant	3.714	3.749	3.768	3.637	3.818	3.679	3.857	3.711
	(.056)**	(.065)**	(.137)**	(.158)**	(.139)**	(0.162)**	(0.140)**	(0.162)**
Observations	5,547	5,547	1,090	1,090	1,090	1090	1090	1090
R-squared	.02	.04	.04	.07	.04	0.07	0.05	0.07
Panel C — 10th percentile								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Health insurance	0.056	0.075	0.006	−0.011	−0.003	−0.020	−0.002	−0.017
	(.021)*	(.022)**	(.039)	(.041)	(.040)	(.042)	(.040)	(.042)
Pension	−.028	.024	.029	.026	.028	.027	.024	.027
	(.028)	(.029)	(.054)	(.055)	(.054)	(.055)	(.055)	(.057)
Constant	1.166	.707	1.122	.959	1.096	.919	1.105	.936
	(.035)**	(.071)**	(.070)**	(.153)**	(.072)**	(.156)**	(.079)**	(.157)**
Observations	5,549	5,549	935	935	935	935	935	935
R-squared	.02	.04	0.03	.08	.03	.08	.03	.08
Industry/occupation dummies	No	Yes	No	Yes	No	Yes	No	Yes
Additional covariates	...	...	Union(0,1)	Union(0,1)	Union(0,1) Full-time(0,1)	Union(0,1) Full-time(0,1)	Union(0,1) Full-time(0,1) Firm size	Union(0,1) Full-time(0,1) Firm size

NOTE: Standard set of covariates include age; number of children under age 6; and indicator variables for black, Hispanic, high school graduate, some college, college graduate, married, previously married, and urban residence. Data set—CPS; Year: 1998; Dependent variable: log (hourly wage). Standard errors in parentheses; * significant at 5 percent; **significant at 1 percent.

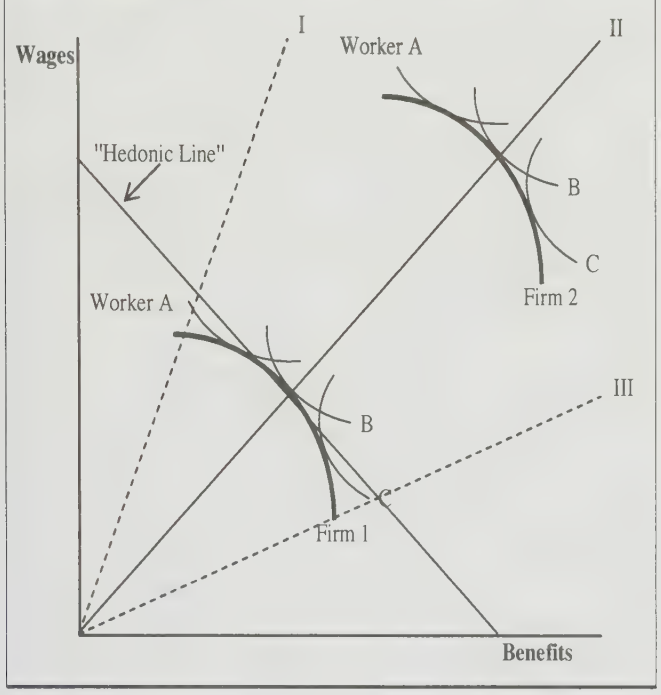
the health insurance coefficient is smaller than for the whole sample and the analogous result in the NLSY.

The estimates for the pension variable are somewhat more muddled. In the NLSY sample, pension coverage remains positive in panel B and is smaller than the analogous results in panel A; the estimates are not statistically significant however. For the CPS, the coefficient on pensions is *negative*, between -0.002 and -0.04, and statistically significant in the first two columns. The overall fit is markedly worse in the subgroup (R^2 around 0.05 for both samples) and the number of observations drops significantly in the NLSY, from around 4,700 in panel A to fewer than 500 observations in panel B.

The results for respondents at the upper end of the distribution suggest that wealthier individuals trade higher wages for less health and life insurance benefits. Intuitively, because individuals at the higher end of the distribution are better able to purchase insurance in the private market, the offset of health and life insurance is logical. The estimates also show that the correlation between wages and life insurance (and pensions) is much higher for workers at the low end of the distribution. When additional covariates are included in the regression (table 3, columns (6)–(10)), the same results also hold for health insurance. The results for pensions conflict each other between data sets in tables 3 and 4—estimates from other models (fixed effects and quantile regressions) are examined in the following sections and tend to be more in concert.[48]

Analogous to the sample for those at the upper end of the distribution, panel C estimates the model at the other extreme—those at and below the 10th percentile of the

Exhibit 1. Basic hedonic diagram



distribution. The results are strikingly different from those at the 90th percentile. In the NLSY specification, the health insurance coefficient is negative for specifications both with and without industry-occupation dummies but is statistically insignificant. In the CPS, which may be somewhat more reliable given the number of observations (5,500 and 935 observations compared to about 470 observations), the coefficient on health insurance is positive and statistically significant in the first three columns, between 0.007 and 0.08. The coefficient on health insurance is negative in the other five columns but of smaller magnitude and does not satisfy statistical significance tests. Regardless of the data set, the coefficient on health insurance is distinctly smaller in this sample than when all workers are included.

Again, the coefficient on the pension variable differs depending on the data set. In the NLSY, the coefficient on pensions is much larger than for the entire sample—between 0.34 and 0.41—and is statistically significant in all 10 columns. In the CPS however, the estimate on pensions is positive in nine of the ten regressions but is not statistically distinguishable from zero in any of the runs. Here also, the coefficients are smaller than their counterparts in panel A, different from the NLSY-based estimates. Also notice however, that there are more missing observations when unions, full-time status, and firm size are added to the CPS than in the NLSY. This may account for some of the differences across the columns in table 4.

Ultimately, the results for the bottom of the distribution are consistent in magnitude but are mixed in terms of statistical significance and sign. Estimates from the CPS imply that people at the bottom of the distribution correlate higher benefits with higher wages and people at the other end of the distribution correlate *lower* benefits with higher wages. The NLSY implies a negative correlation between wages and health and life insurance (though health insurance enters insignificantly) for workers at the lower end of the wage distribution but those workers also exhibit a positive correlation between wages and pensions. The differences not only raise interesting conceptual and distributional issues but also issues of estimation. The possibility of unobserved worker heterogeneity is one concern with these models. In the next section, the analysis is extended by estimating a fixed effects model, exploiting the panel nature of the NLSY.

Fixed effects. The ordinary least squares models, estimated earlier, neglect some important behavior of workers in the labor market. Specifically, ordinary least squares ignores the effects of unobserved heterogeneity among workers and thus in this section, a fixed effects model is estimated using the NLSY sample from 1990–98. (See table 5.)[49]

The entire sample from 1990–98 is pooled, resulting in around 30,000 observations. The coefficients on the variables of interest are similar in sign and statistical significance to the ordinary least squares results in table 3, but are smaller in magnitude. Again, the coefficients are all positive and regressions that include industry and occupation dummies result in slightly smaller coefficients on the variables of interest.

When the sample is segmented and the model is estimated for the 10th and 90th percentiles, the resulting estimates are not consistently statistically significant and the sign on health and life insurance is negative in most of the specifications. For the lower end of the distribution, life insurance enters negatively and is statistically significant in regressions that include the additional covariates. Pensions enter positively and are statistically significant in the other half; the regressions *without* the additional covariate set. For the 90th percentile, the model fit is poor with almost no coefficients entering statistically significantly, although the sign matches those for the 10th percentile. Overall, accounting for unobserved worker heterogeneity does not help identify the hedonic effect but does reinforce the results found in the previous tables, although the magnitude is much smaller.

Quantile regressions. It is apparent from the results in the first three tables that the relationship between wages and benefits are contingent upon the selected sample. Estimates for workers at the top of the earnings distribution suggest a tendency for workers to forego higher wages in lieu of more pension benefits, whereas workers at the bottom of the

Table 5. Regression results for NLSY via fixed effects

	Equation									
Panel A–Whole sample										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Health insurance	0.049	0.044	0.055	0.044	0.033	0.014	0.033	0.014	0.031	0.013
	(.005)**	(.006)**	(.005)**	(.006)**	(.009)**	(–.010)	(.009)**	(–.010)	(0.009)**	(–0.010)
Life insurance	(.208)	(.190)	(.210)	(.193)	(.197)	(.139)	(.174)	(.114)	.172	.114
	(.072)**	(.076)*	(.072)**	(.076)*	(.091)*	(–.094)	(–.091)	(–.094)	(–.091)	(–.095)
Pension	(.050)	(.050)	(.050)	(.050)	(.046)	(.042)	(.046)	(.041)	.046	.041
	(.006)**	(.006)**	(.006)**	(.006)**	(.008)**	(.009)**	(.008)**	(.009)**	(.008)**	(.009)**
Total days off	...	...	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	.000	.000
	...	...	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	.000	.000
Constant	(2.206)	(2.283)	(2.192)	(2.268)	(2.473)	(2.567)	(2.408)	(2.504)	2.393	2.492
	(.085)**	(.087)**	(.086)**	(.088)**	(.157)**	(.160)**	(.158)**	(.161)**	(.159)**	(.161)**
Observations	32,015	32,015	32,015	32,015	14,134	14,134	14,134	14,134	14,134	14,134
R-squared	.05	0.05	0.05	0.05	0.05	0.06	0.05	0.06	0.05	0.06
Panel B– 90th percentile										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Health insurance	–0.028	–0.037	–0.028	–0.037	0.079	0.050	0.094	0.067	0.096	0.073
	(.023)	(.026)	(.023)	(.026)	(.060)	(.069)	(.060)	(.070)	(.060)	(.070)
Life insurance	–0.011	–.063	–.012	–.065	–.006	–.089	–.069	–.126	–.064	–.109
	(.177)	(.194)	(.177)	(.193)	(.344)	(.375)	(.344)	(.375)	(.345)	(.375)
Pension	.035	.033	.035	.033	.038	.020	.035	.020	.036	.020
	(.016)*	(.017)	(.016)*	(.017)	(.033)	(.035)	(.033)	(.035)	(.033)	(.035)
Total days off	...	...	–.000	–.000	–.000	–.000	–.000	–.000	.000	–.000
	...	...	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	.000	(.000)
Constant	3.058	3.130	3.063	3.133	.888	1.124	.591	.827	.078	1.040
	(.478)**	(.490)**	(.479)**	(.490)**	(1.267)	(1.297)	(1.270)	(1.303)	(1.277)	(1.311)
Observations	3,213	3,213	3,213	3,213	1,414	1,414	1,414	1,414	1,414	1,414
R-squared	.05	.06	.05	.06	.04	.05	.05	.06	.05	.06
Panel C– 10th percentile										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Health insurance	–0.007	–0.024	–0.007	–0.026	0.012	–0.012	0.013	–0.011	0.009	–0.013
	(.024)	(.025)	(.024)	(.025)	(.035)	(.035)	(.035)	(.035)	(.035)	(.035)
Life insurance	–.696	–.835	–.675	–.810	–2.699	–2.287	–2.679	–2.272	–2.674	–2.265
	(.617)	(.624)	(.618)	(.625)	(.847)**	(.842)**	(.850)**	(.845)**	(.854)**	(.849)**
Pension	.207	.197	.206	.197	.039	–.041	.040	–.040	.043	–.037
	(.046)**	(.048)**	(.046)**	(.048)**	(.070)	(.074)	(.070)	(.074)	(.070)	(.075)
Total days off	...	...	.000	.000	.000	.000	.000	.000	.000	.000
	...	...	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
Constant	1.124	1.314	1.094	1.277	1.539	1.239	1.545	1.239	1.534	1.232
	(.239)**	(.263)**	(.242)**	(.266)**	(.461)**	(.499)*	(.462)**	(.500)*	(.464)**	(.501)*
Observations	3,203	3,203	3,203	3,203	1,440	1,440	1,440	1,440	1440	1440
R-squared	.02	.04	.02	.04	.06	.16	.06	.16	.06	.16
Industry/occupation dummies	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Additional covariates	...	...	...	...	Union(0,1)	Union(0,1)	Union(0,1) Full-time(0,1)	Union(0,1) Full-time(0,1)	Union(0,1) Full-time(0,1) Firm size	Union(0,1) Full-time(0,1) Firm size

Standard set of covariates include age; number of children under 6; and indicator variables for black, hispanic, high school graduate, some college, college graduate, married, previously married, urban residence and actual experience (weeks). Data set: NLSY; years: 1990–98; Dependent variable: log (hourly wage). Standard errors in parentheses; * significant at 5 percent; ** significant at 1 percent.

distribution take jobs that have benefits in addition to their regular wages. In this section, quantile regressions are performed on the 10th and 90th percentiles in order to fit median regression analysis on the two parts of the distribution. (The results from the quantile regression model are available upon request to the author.)

The coefficients from the quantile regressions are uniformly positive and generally statistically significant. In

the CPS, workers at the 10th percentile respond more strongly to health insurance in terms of wages than those at the 90th percentile.[50] The coefficient estimates for workers below the 10th percentile range between 0.20 and 0.29 while the estimates for the 90th percentile are consistently smaller, between 0.09 and 0.11. The coefficients on pensions demonstrate the differences between the two parts of the distribution: For workers below the 10th percentile, the estimate on pensions range between 0.08 and 0.14, larger than the estimates for the 90th percentile, which are between 0.07 and 0.12. Thus, workers at the bottom part of the distribution respond more strongly to wage changes than do those at the top of the distribution. In the NLSY, the estimates on health insurance are uniformly larger for the 10th percentile than the 90th percentile, mirroring the results from the CPS data set. For pensions however, the estimates for the 10th percentile are larger than their 90th percentile counterparts about half of the time. This suggests that workers at the low end of the distribution respond more strongly in terms of wages for health insurance but that workers at the high end of the distribution may respond more strongly with respect to pensions.

In summary, the results from the quantile regressions generally confirm the ordinary least squares estimates. The effect of health insurance is larger for the bottom tenth of the distribution in both data sets but the effect of pension benefits is somewhat mixed. The evidence in this section continues to be indicative of the "good jobs, bad jobs" story, although the use of the quantile regression method was useful to gain insight into the different relationships between different parts of the wage distribution.

As previously noted, results for additional subgroups including men and women; those above the minimum wage plus 25 cents and plus 50 cents; and several "at-risk" groups, are omitted from the current analysis. The issues specific to these groups are important for two reasons. First, different groups may respond differently to work incentives. For example, do women have less (more) benefits and do they pay more (less) implicitly because of how pay packages work? Second, low-wage groups may reveal an interesting relationship between wages and benefits because their wages are bounded below by the minimum wage. In results not reported, an instrumental variable model was estimated by using State-level minimum wages.[51] Separating the worker population into subgroups provides an opportunity to explore different instruments and to track different behaviors and is a viable area for future work.

Conclusion

Compensating wage differentials are an important aspect of the labor market, yet empirical estimation of these differentials lags behind theory. To date, no researcher has convincingly estimated a hedonic model although many have produced mixed results. The estimates in this article point more to correlations between wages and benefits than to tradeoffs. The analysis did accomplish two main tasks. First, the data employed in the analysis are seldom used by researchers due to confidentiality restrictions. And second, the estimates suggest compensating differentials for subgroups of the population, namely the (weakly) 10th and 90th percentiles but tell a stronger story about the positive correlation between wages and benefits and how they differ at various points in the wage distribution.

The estimates imply that individuals at the top of the wage distribution sometimes earn more than three times as much in certain benefits than those at the bottom of the distribution. Workers above the 90th percentile take slightly more of their compensation in the form of wages than do people below the 10th percentile. Workers at the top of the distribution also take (proportionately) less in insurance and required benefits but roughly the same in pension benefits than do workers at the lower tail of the wage distribution.

In all, the implications of this study are threefold. First, the detailed data from the ECI did generate improvements of point estimates in that statistical significance was achieved in most models. Second, the two different household-level data sets, for the most part, confirmed one another; another check for consistency. And third, point estimates were generally larger for workers at the low end of the wage distribution although estimates for workers above the 90th percentile suggest a compensating differential for health insurance and wages.

The implications of the distribution of benefits on the (gross) wage distribution are important for policy and labor market considerations. Distributional issues as they relate to nonwage forms of compensation are recently receiving more attention and should continue to be explored as better benefit data and better access to such data become available. □

Notes

ACKNOWLEDGEMENT: This article was written while the author was a graduate student at Syracuse University. The author would especially like to thank Brooks Pierce and John Ruser for help using the Bureau of Labor Statistics ECI data. He also thanks William Horrace, Thomas Kniesner, Jeff Kubik, Solomon Polachek, and Timothy Smeeding for helpful comments and suggestions. This research was conducted by having access to restricted BLS data on-site at BLS. The views expressed here are those of the author and do not necessarily reflect the views of BLS.

[1] Sherwin Rosen, "Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition," *The Journal of Political Economy*, January 1974, pp. 34–55.

[2] Gary W. Loveman, and Chris Tilly, "Good Jobs or Bad Jobs: What Does the Evidence Say?" *New England Economic Review,* (January/February, 1988), pp. 46–65.

[3] William Wiatrowski, "The National Compensation Survey: Compensation Statistics for the 21st Century," *Compensation and Working Conditions* (Bureau of Labor Statistics, Winter 2000), pp. 5–14.

[4] Employee Benefit Research Institute, "Compensation Costs in Private Industry March 1987 to March 2001," *Facts from EBRI,* August 2001, on the Internet at: **http://www.ebri.org/facts/0801fact.htm**.

[5] Masanori Hashimoto, "Fringe Benefits and Employment," in W. T. Alpert and S. A. Woodbury, eds., *Employee Benefits and labor markets in Canada and the United States* (W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan, 2000), pp. 229–62.

[6] B. K. Atrostic, "Comment," in J. E. Triplett, ed., *The Measurement of Labor Cost,* NBER Studies in Income and Wealth, vol. 48 (Chicago, University of Chicago Press, 1981), pp. 389–94; Arleen Leibowitz, "Fringe Benefits in Employee Compensation," in J.E. Triplett, ed., *The Measurement of Labor Cost.* NBER Studies in Income and Wealth, vol. 48 (Chicago, University of Chicago Press, 1981), pp. 371–89; and Timothy Smeeding, "The Size Distribution of Wage and Nonwage Compensation: Employer Cost versus Employee Value," in J. E. Triplett, ed., *The Measurement of Labor Cost,* NBER Studies in Income and Wealth, vol. 48 (Chicago, University of Chicago Press, 1981), pp. 237–86.

[7] For example, see Stephen Woodbury, "Substitution between Wage and Nonwage Benefits," *The American Economic Review,* March 1983, pp. 166–82 and Edward Montgomery, Kathryn Shaw, and Mary Ellen Benedict, "Pensions and Wages: An Hedonic Price Theory Approach," *International Economic Review,* vol. 33 no. 1, 1992, pp. 111–28.

[8] Charles Brown, "Equalizing Differences in the Labor Market," *The Quarterly Journal of Economics,* February 1980, pp. 113–34.

[9] Jonathan Gruber, and Alan B. Krueger, "The Incidence Mandated Employer-Provided Insurance: Lessons from Workers Compensation Insurance," in D. Bradford, ed., *Tax Policy and the Economy,* vol. 5 (Cambridge, MA, MIT Press, 1991), pp. 111–44.

[10] Jonathan Gruber, "The Incidence of Mandated Maternity Benefits," *American Economic Review,* vol. 84 no. 3, 1994, pp. 622–41.

[11] Joseph G. Altonji, and Christina H. Paxson, "Labor Supply Preferences, Hours Constraints, and Hours-wage Trade-offs," *Journal of Labor Economics,* April 1988, pp. 254–76.

[12] Brooks Pierce, "Compensation Inequality," *Quarterly Journal of Economics,* November 2001, pp. 1493–1525; Pierce Brooks, "Compensation Inequality," *Bureau of Labor Statistics Working Paper 323* (Bureau of Labor Statistics, June 1999); and Craig A. Olson, "Do Workers Accept Lower Wages in Exchange for Health Benefits?" *Journal of Labor Economics,* vol. 20, no. 2 (part 2), 2002, pp. S91–S114.

[13] Pierce "Compensation Inequality," 2001; Pierce, "Compensation Inequality," 1999.

[14] Olson, "Do Workers Accept Lower Wages in Exchange for Health Benefits?" 2002. Olson also estimates the same models using data from the April 1993 Consumer Price Index Fringe Benefit Supplement and again finds negative, though statistically insignificant, coefficients in the range of –0.290 to –0.030.

[15] See also, Thomas C. Buchmueller, John DiNardo, and Robert G. Valletta, "Union Effects on Health Insurance Provision and Coverage in the United States," *Industrial and Labor Relations Review,* July 2002, pp. 610–27.

[16] The earlier studies are: Arleen Leibowitz, "Fringe Benefits in Employee Compensation, 1981;" B. K. Atrostic, "Alternative pay measures and labor market differentials," *BLS Working Paper 127* (Bureau of Labor Statistics, 1983); Woodbury, "Substitution between Wage and Nonwage Benefits, 1983;" and Brown, "Equalizing Differences in the Labor Market, 1980." The later studies are: Gruber, "The Incidence of Mandated Maternity Benefits," 1994; Gruber, and Krueger, "The Incidence Mandated Employer-Provided Insurance, 1991; and Altonji, and Paxson, "Labor Supply Preferences," 1988.

[17] Pierce, "Compensation Inequality," 2001; Pierce, "Compensation Inequality," 1999; and William J. Carrington, Kristin McCue, and Brooks Pierce, "Nondiscrimination Rules and the Distribution of Fringe Benefits," *Journal of Labor Economics,* 2002, vol. 20 no. 2, part 2, pp. S5–S33.

[18] The BLS staff pointed out that the distinction between defined benefit and defined contribution plans in the ECI survey is sometimes vague and thus calculating average values by categories may be erroneous. Thus, for the regressions in this study, the pension variable refers to all pension plans including defined benefit and defined contribution plans.

[19] For more on the details of the ECI data set, see John W. Ruser, "The Employment Cost Index: What is it?" *Monthly Labor Review,* September 2001, pp. 3–20.

[20] Bureau of Labor Statistics. "National Employment, Hours, and Earnings from the Current Employment Statistics Survey," Standard Industrial Classification code based, on the Internet at: **http://www.bls.gov/ces** (extracted July 2002). Additionally, the BLS uses certain imputation procedures to address sample attrition over time. A set of these imputed values was dropped from the sample used in this study. The author would especially like to thanks Brooks Pierce for calling attention to both of these issues.

The construction of the consistent weights modifies the industry weights in the ECI:

$$\hat{w}_{vi} = \frac{w_{qi} \times Employment_{yi}}{\sum_{q}\sum_{i} w_{qi}}$$

where w = industry weight in the ECI; q = quarter; i = industry; y = year; and $Employment_{yi}$ = external employment count in industry i in year y.

[21] Due to the confidentiality of the ECI data set, industry and occupation cell sizes were restricted based on the number of observations in each. In addition, because some agriculture and government employees are not included in the ECI, they were eliminated from the NLSY and CPS samples. This leaves nine occupation categories (executive, administrative and managerial; sales; administrative support; precision production, craft and repair; machine operators, assemblers and inspectors; transportation and material moving; handlers, equipment cleaners, helpers, and laborers; service except private household; and professional, technical and specialty) and seven industry categories (mining; construction; manufacturing; transportation; wholesale and retail trade; finances, insurance and real estate; and services and public administration).

[22] Bureau of Labor Statistics "Employer Costs for Employee Compensation: Historical Listing, 1986–2001," on the Internet at: **ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ECECHIST.PDF** (September, 2001).

[23] Smeeding, "The Size Distribution of Wage and Nonwage Compensation," 1981.

[24] The NLSY does not ask whether a respondent has leave or not; instead it asks how many days are provided to the respondent. In this study, the author chose to use the total number of days off from the NLSY (vacation plus sick) rather than use the imputed dollar values from the ECI because actual days off is probably a better measure. The total number of days off variable was top-coded at 260 because that is the greatest number of days an individual working five days a week, 52 weeks a year could use. The difference between using the NLSY days-off variable and the ECI dollar variable was not very significant.

[25] Daniel S. Hammermesh, "LEEping into the future of labor economics: the research potential of linking employer and employee data," *Labour Economics*, March 1999, pp. 25–42.

[26] John M. Abowd, and Francis Kramarz, "Econometric analyses of linked employer-employee data," *Labour Economics*, March, 1999, pp. 53–76.

[27] Robert F. Elliott and Robert Sandy, "Adam Smith may have been right after all: A new approach to the analysis of compensating differentials," *Economics Letters*, April 1998, pp. 127–31.

[28] Greg J. Duncan and Daniel H. Hill, "An Investigation of the Extent and Consequences of Measurement Error in Labor-economic Survey Data," *Journal of Labor Economics*, October 1985, pp. 508–32; and Wesley Mellow and Hal Sider, "Accuracy of Response in Labor Market Surveys: Evidence and Implications," *Journal of Labor Economics*, October 1983, pp. 331–44.

For an early look at some of these issues, see also R. Smith, and R. Ehrenberg, "Estimating Wage-Fringe Trade-Offs: Some Data Problems," in J.E. Triplett, ed., *The Measurement of Labor Cost*, vol. 48 (Chicago, University of Chicago Press, NBER Studies in Income and Wealth, 1981), pp. 347–70.

[29] For a comprehensive review of this literature, see John Bound, Charles Brown, and Nancy Mathiowetz, "Measurement Error in Survey Data," in James J. Heckman and Edward Leamer eds., *Handbook of Econometrics, Volume 5* (Amsterdam, North-Holland, 2001), pp. 3707–45.

[30] For an extended discussion, see Smeeding, "The Size Distribution of Wage and Nonwage Compensation,"1981.

[31] The health insurance question in the CPS is slightly different than the question in the NLSY; it asks whether the respondent was covered by a health plan provided by their employer. This implies that individuals answer having already accepted (or rejected) health insurance offers. The questions for pensions however, are similar in the two household samples.

[32] The estimates use the hourly wage reported in the NLSY and CPS, not the ECI. This approach is preferred because the focus is on the tradeoffs made by workers, not employers.

[33] Actual experience is only included in the NLSY sample and is calculated by summing the number of weeks worked for each year of the survey from 1979 to the year of interest. If, in any given year, a respondent was a student and the data for the number of weeks is missing, weeks worked are then set equal to zero in that year. Additional missing data are then dropped from the sample. Values for 1995 (and 1997) are set equal to the average of 1994 and 1996 (and 1996 and 1998).

[34] Estimates reported use the NLSY and CPS sample weights; using the ECI sample weights makes little difference on the results in most models.

[35] Moshe Buchnisky, "Recent Advances in Quantile RegressionModels: A Practical Guideline for Empirical Research," *The Journal of Human Resources*, Winter 1998, pp. 88–126; and Roger Koenker, and Kevin F. Hallock, "Quantile Regression," *Journal of Economic Perspectives*, Fall 2001, pp. 143–56. The author thanks the BLS reviewer for making this analogy.

[36] Olson, "Do Workers Accept Lower Wages?" 2002.

[37] Pierce, "Compensation Inequality," 1999.

[38] See the dissertation by Jonathan A. Schwabish, "Three Essays in Inequality," unpublished doctoral dissertation, Syracuse University, Syracuse, New York, 2003 for an explanation of the results for these groups.

[39] As discussed in the literature section, the studies by Gruber "The Incidence of Mandated Maternity Benefits," 1994 and Gruber and Krueger, "The Incidence Mandated Employer-Provided Insurance," 1991 use variation in State mandated benefit coverage as instruments to correct for endogeneity introduced by their benefit variables. The current study performed similar exercises with the CPS data using variation in State minimum wages as instruments for the wage. The instruments proved to be weak however, and thus are not reported.

[40] Craig Copeland, "Pension Plan Participation Continued to Rise in 2000—What Next?" *EBRI Notes* (Employee Benefit Research Institute, March 2002), pp. 4–7.

[41] Rachel Christensen, "Value of Benefits Constant in a Changing Word: Findings from the 2001 EBRI/MGA Value of Benefits Survey," *EBRI Notes* (Employee Benefit Research Institute, March 2002), pp. 1–3.

[42] Note that the mean age in the NLSY will differ by approximately 1 year in each survey year because of the panel nature. The CPS, by contrast, will basically have the same mean age in each survey. Thus, the comparison in 1998 is the closest in terms of ages.

[43] As mentioned earlier in the endnote section, the estimates use the hourly wage reported in the NLSY and CPS, not the ECI. This approach is preferred because the focus is on the tradeoffs made by workers, not employers.

[44] In regressions where the benefit variables enter individually, coefficients are markedly larger in magnitude—they are not reported in this study because the more comprehensive models are more informative and perform just as well.

[45] Christensen, "Value of Benefits," 2002.

[46] Loveman and Tilly, "Good Jobs or Bad Jobs," 1988, pp. 46–65.

[47] Note that the percentile points in the remaining tables were calculated in the household surveys, not from the ECI data.

[48] Recall that the NLSY has a compressed age distribution, whereas the CPS includes persons 18 to 64 years of age. This may account for some of these differences.

[49] A fixed effects model solely on the ECI data was also considered. However, sample attrition issues within the ECI as well as confidentiality issues led this to be too difficult a task.

[50] Tables containing the results for the 10^{th} and 90^{th} percentiles for both data sets are available upon request to the author and can be found in Schwabish, "Three Essays in Inequality," 2003.

[51] The results from the instrumental variables model are not a main focus of this study for several reasons, including mixed sign and lack of statistical significance on the instrumental variable (the State minimum wage); poor overall fit; and mixed results in the second stage.

Employment in the information sector in March 2004

Gerald Perrins

Employment in the information sector stood at 3,158,000 in the United States in March 2004, 1.7 percent less than the year before.[1] Nationwide, 56,000 jobs were lost over this 12-month period, continuing a trend of over-the-year declines that began in September 2001. (See chart 1.) Since the start of the most recent recession in March 2001, this industry sector has lost 555,000 jobs or approximately 1 out of every 7 positions. Nearly three-fourths of the monthly over-the-year losses in information since March 2001 occurred in the telecommunications (–276,300) and publishing (–127,300) industries. (Use of not seasonally adjusted data does not allow for over-the-month comparisons; accordingly, monthly analysis was based on the over-the-year change.)

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Information employment by State

Among the 14 States in the Nation in which information-sector employment exceeded 75,000, 11 reported over-the-year job decreases in March 2004, two (Georgia and North Carolina) were essentially unchanged, and only one (Washington) recorded an increase.[2] The largest over-the-year employment declines were in California (–16,800),

Chart 1. Employment in the information sector, over-the-year net change, 1999–2004

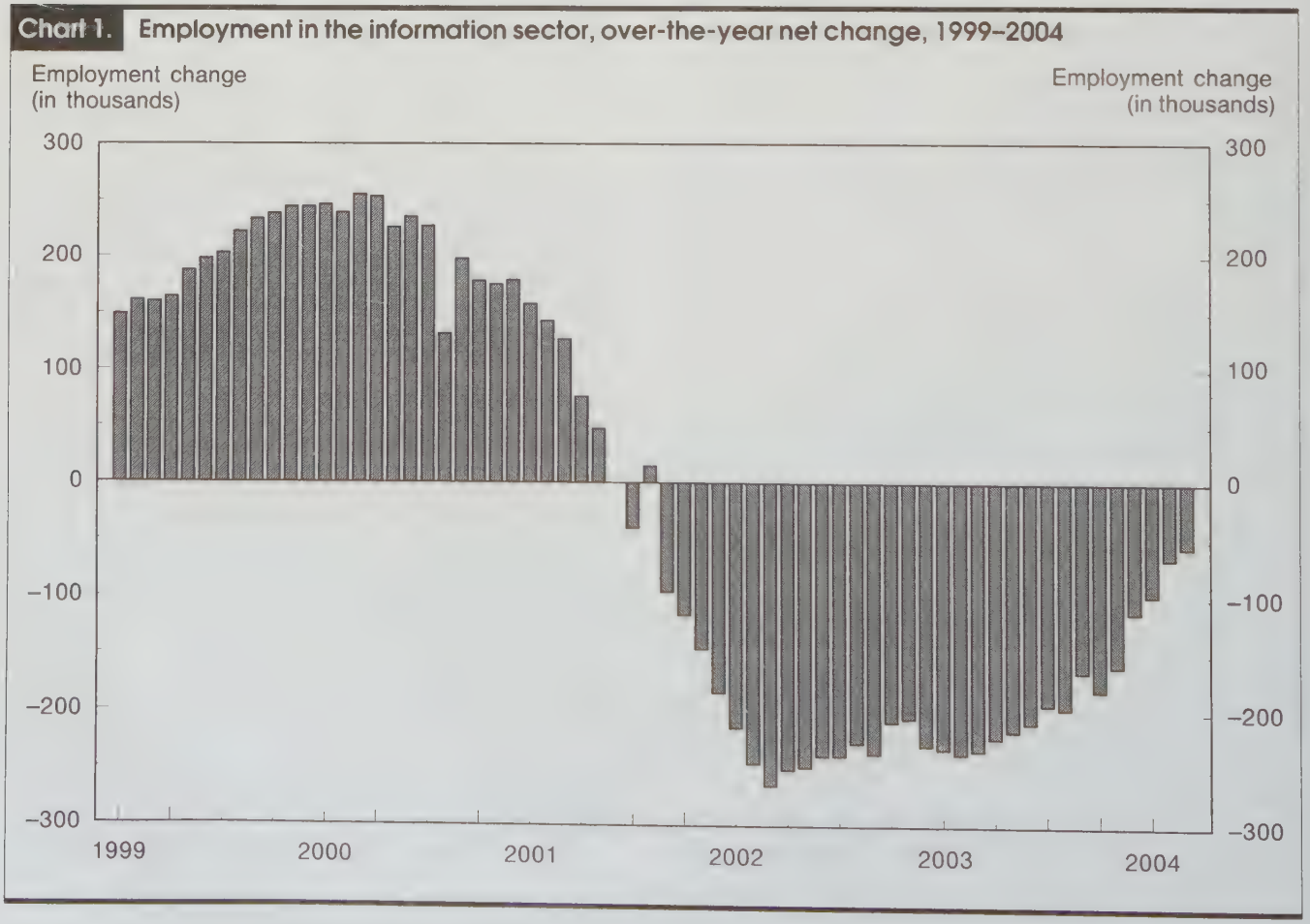


Table 1. Employment change in the information sector, March 2003–04, United States and selected States, not seasonally adjusted

[Numbers in thousands]

Area	March 2003	January 2004	February 2004	March 2004[3]	Changes from March 2003 to March 2004	
					Net	Percent
United States	3,214.0	3,151.0	[1]3,155.0	3,158.0	–56.0	–1.7
Northeast						
Massachusetts	93.0	88.6	88.4	88.0	–5.0	–5.4
New Jersey	102.8	99.1	99.7	100.8	–2.0	–1.9
New York	278.1	270.3	273.6	276.2	–1.9	–0.7
Pennsylvania	124.3	121.1	120.9	121.7	–2.6	–2.1
South						
Florida	173.0	171.1	171.6	170.1	–2.9	–1.7
Georgia	127.3	126.8	127.3	126.5	–0.8	–0.6
North Carolina	75.8	74.7	75.6	75.1	–0.7	–0.9
Texas	237.5	228.5	229.1	230.4	–7.1	–3.0
Virginia	101.5	101.1	100.3	100.4	–1.1	–1.1
Midwest						
Illinois	135.2	131.7	131.2	131.4	–3.8	–2.8
Ohio	97.7	95.6	95.0	95.1	–2.6	–2.7
West						
California	481.0	466.2	466.7	464.2	–16.8	–3.5
Colorado	85.7	82.7	83.3	82.7	–3.0	–3.5
Washington	91.5	92.7	93.4	93.8	2.3	2.5

NOTE: States selected had information-sector employment levels exceeding 75,000 in September 2003.

[1] Data for the United States are preliminary.

[2] Data are preliminary.

Table 2. Employment change in selected industries in the information sector over the March 2003–04 period, United States and selected States

[Preliminary data, not seasonally adjusted]

Area	Total	Publishing, except Internet	Motion picture and sound recording	Broadcasting, except Internet	Telecommunications	Internet service providers[1]
United States	–56,000	–20,900	9,000	6,500	–43,900	–7,800
Northeast						
Massachusetts	–5,000	–2,200	–	–	–1,600	–
New Jersey	–2,000	–700	–	–	–1,400	–500
New York	–1,900	500	900	300	–3,700	–800
Pennsylvania	–2,600	–1,100	–	–	–900	–700
South						
Florida	–2,900	600	–	–500	–1,900	–1,400
Georgia	–800	–	–	–	800	0
North Carolina	–700	–400	–	–	–1,200	–300
Texas	–7,100	–1,500	–	–	–6,100	–600
Virginia	–1,100	–	–	–	–2,700	–
Midwest						
Illinois	–3,800	–1,200	–100	–300	–1,800	–200
Ohio	–2,600	–700	–	–	–1,700	–
West						
California	–16,800	–5,200	–3,100	700	–8,300	–1,300
Colorado	–3,000	–900	–	–	–2,300	–
Washington	2,300	–	–	0	–100	–

[1] Data for Internet service providers, Web search portals, and data processing services are included in this category.

NOTE: Data for Internet publishing and broadcasting and other information services are available for the United States as a whole but are omitted from this table. Dash indicates data not available.

followed by Texas (–7,100), and Massachusetts (–5,000). (See table 1.) These three States employed 1 out of every 4 workers in this industry. The largest over-the-year percentage declines in employment occurred in Massachusetts (–5.4 percent), followed by Colorado and California (–3.5 percent each), and Texas (–3.0 percent).

The only State to post an over-the-year employment increase in the information sector was Washington, which added 2,300 jobs between March 2003 and 2004, a gain of 2.5 percent. This was the third consecutive month that the State had more information jobs than a year earlier. Until these recent advances, Washington had registered over-the-year job declines in every month since July 2001. In the other 13 States, over-the-year job declines in the information sector have continued for lengthy periods, ranging from 30 to 36 consecutive months.

Among States with employment declines in the information industry, the telecommunications subsector was typically the hardest hit, with particularly heavy losses in California (–8,300), Texas (–6,100), and New York (–3,700). (See table 2.) Employment declines were also widespread in the publishing subsector, with five States (California, Massachusetts, Texas, Illinois, and Pennsylvania) recording declines of more than 1,000 jobs since last March. Other subsectors were highly concentrated; Florida and California, which have a large concentration of Internet service providers jobs, bore the brunt of this industry's losses—down 1,400 and 1,300 jobs, respectively. The declines in these two States accounted for more than one-third of the over-the-year job losses in the Internet service providers industry nationwide. Despite the loss of 3,100 motion picture and sound recording jobs in California, this industry gained 9,000 jobs nationwide between March 2003 and 2004. Broadcasting was the only other information industry sector to add jobs over the year nationwide, up 6,500.

Employment in the information sector is not regionally concentrated, with those States with job counts exceeding 75,000 located in all four geographic regions of the country.[3] (See map.) Likewise, over-the-year employment declines in this industry extended to all regions of the country over the last 2 years. (See tables 3, 4, and 5 for changes during 2002, 2003, and 2004.)

Table 3. Employment changes over the July–December 2002 period, United States and selected States, not seasonally adjusted

[Numbers in thousands]

Area and region	Over-the-year net change						Over-the-year percent change					
	July	Aug.	Sept.	Oct.	Nov.	Dec.	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States	–239.0	–228.0	–237.0	–209.0	–206.0	–230.0	–6.6	–6.3	–6.6	–5.9	–5.8	–6.5
Northeast												
Massachusetts	–12.1	–11.7	–11.1	–9.2	–8.7	–7.8	–10.8	–10.6	–10.3	–8.7	–8.3	–7.4
New Jersey	–14.7	–12.5	–16.9	–19.9	–19.2	–19.7	–11.7	–10.1	–13.4	–16.0	–15.3	–15.7
New York	–34.1	–29.7	–29.5	–26.6	–27.5	–26.9	–10.5	–9.2	–9.3	–8.4	–8.6	–8.5
Pennsylvania	–8.2	–7.5	–6.9	–6.9	–6.8	–7.0	–6.0	–5.5	–5.2	–5.2	–5.1	–5.3
South												
Flordia	–11.4	–10.9	–9.9	–8.6	–8.0	–8.1	–6.1	–5.8	–5.3	–4.7	–4.4	–4.4
Georgia	–12.0	–11.8	–12.1	–10.9	–13.3	–13.0	–8.4	–8.3	–8.5	–7.7	–9.4	–9.2
North Carolina	–2.8	–3.3	–2.3	–1.9	–2.4	–1.0	–3.4	–4.0	–2.9	–2.4	–3.0	–1.3
Texas	–21.8	–22.0	–22.1	–21.0	–20.9	–19.3	–8.1	–8.2	–8.3	–7.9	–7.9	–7.4
Virginia	–14.3	–13.6	–14.0	–12.2	–10.5	–10.2	–12.0	–11.5	–12.0	–10.7	–9.3	–9.0
Midwest												
Illinois	–11.4	–11.4	–11.9	–10.4	–11.1	–12.1	–7.3	–7.4	–7.8	–6.9	–7.4	–8.0
Ohio	–5.5	–5.5	–5.3	–5.9	–5.3	–5.4	–5.1	–5.2	–5.1	–5.7	–5.1	–5.2
West												
California	–52.6	–43.8	–47.6	–36.1	–27.6	–43.1	–9.8	–8.2	–9.0	–6.9	–5.3	–8.2
Colorado	–14.9	–14.5	–13.9	–12.9	–12.3	–11.9	–14.0	–13.7	–13.4	–12.6	–12.1	–11.8
Washington	–5.4	–5.1	–3.9	–3.0	–2.7	–3.4	–5.4	–5.1	–4.0	–3.1	–2.8	–3.5

Table 4. Employment changes over the January–December 2003 period, United States and selected States, not seasonally adjusted

[Numbers in thousands]

Area and region	Over-the year net change											
	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States	−233.0	−237.0	−234.0	−223.0	−217.0	−210.0	−194.0	−197.0	−165.0	−181.0	−160.0	−113.0
Northeast												
Massachusetts	−9.8	−9.6	−9.5	−8.4	−8.2	−7.3	−8.3	−7.7	−7.0	−6.8	−7.0	−7.3
New Jersey	−18.2	−17.9	−17.5	−14.2	−14.3	−13.1	−8.7	−8.0	−7.6	−3.5	−4.5	−3.5
New York	−22.4	−22.3	−20.9	−23.5	−22.1	−26.4	−19.3	−14.6	−16.1	−14.8	−15.0	−12.3
Pennsylvania	−6.3	−6.5	−6.4	−5.5	−5.7	−4.9	−4.2	−3.6	−3.5	−3.5	−3.6	−3.7
South												
Flordia	−8.8	−8.0	−7.8	−8.7	−8.2	−7.7	−5.9	−5.1	−2.8	−1.9	−3.5	−3.4
Georgia	−4.7	−5.5	−6.2	−6.5	−6.8	−5.7	−5.8	−4.7	−4.6	−3.9	−1.8	−1.4
North Carolina	−3.4	−3.3	−3.8	−4.8	−4.5	−3.9	−3.3	−2.7	−1.4	−1.6	−1.7	−2.7
Texas	−19.7	−18.4	−17.7	−16.1	−15.9	−15.2	−12.0	−11.7	−11.8	−11.5	−11.7	−11.6
Virginia	−8.6	−7.8	−7.3	−6.9	−6.6	−5.5	−3.3	−3.3	−2.6	−1.6	−1.8	−1.3
Midwest												
Illinois	−12.1	−11.5	−12.4	−12.1	−11.7	−10.9	−8.6	−8.7	−7.3	−7.0	−6.3	−6.0
Ohio	−5.3	−4.8	−4.5	−4.3	−3.6	−3.8	−3.1	−3.1	−3.2	−2.5	−3.0	−2.8
West												
California	−30.3	−24.8	−38.8	−30.6	−27.3	−35.3	−23.0	−19.5	−20.2	−23.2	−23.2	−14.7
Colorado	−11.6	−10.9	−10.5	−10.2	−9.2	−8.7	−6.9	−6.6	−6.0	−4.9	−5.1	−4.4
Washington	−2.0	−1.9	−2.0	−2.1	−1.6	−1.8	−1.5	−.8	−.7	−.8	−1.0	−.1
	Over-the year percent change											
United States	−6.7	−6.9	−6.8	−6.5	−6.4	−6.1	−5.7	−5.8	−5.0	−5.4	−4.8	−3.4
Northeast												
Massachusetts	−9.5	−9.3	−9.3	−8.4	−8.2	−7.3	−8.3	−7.8	−7.2	−7.0	−7.2	−7.5
New Jersey	−15.0	−14.9	−14.5	−12.2	−12.3	−11.3	−7.8	−7.2	−6.9	−3.3	−4.2	−3.3
New York	−7.5	−7.4	−7.0	−7.9	−7.2	−8.7	−6.6	−5.0	−5.6	−5.1	−5.1	−4.2
Pennsylvania	−4.8	−5.0	−4.9	−4.3	−4.4	−3.8	−3.3	−2.8	−2.8	−2.8	−2.9	−2.9
South												
Flordia	−4.9	−4.4	−4.3	−4.9	−4.6	−4.3	−3.3	−2.9	−1.6	−1.1	−2.0	−1.9
Georgia	−3.5	−4.1	−4.6	−4.9	−5.1	−4.3	−4.4	−3.6	−3.5	−3.0	−1.4	−1.1
North Carolina	−4.3	−4.2	−4.8	−6.1	−5.7	−4.9	−4.2	−3.5	−1.8	−2.1	−2.2	−3.5
Texas	−7.6	−7.2	−6.9	−6.4	−6.3	−6.0	−4.8	−4.7	−4.8	−4.7	−4.8	−4.8
Virginia	−7.8	−7.1	−6.7	−6.4	−6.1	−5.1	−3.1	−3.2	−2.5	−1.6	−1.7	−1.3
Midwest												
Illinois	−8.1	−7.8	−8.4	−8.2	−7.9	−7.4	−6.0	−6.1	−5.2	−5.0	−4.5	−4.3
Ohio	−5.1	−4.7	−4.4	−4.2	−3.5	−3.7	−3.1	−3.1	−3.2	−2.5	−3.0	−2.8
West												
California	−5.9	−4.9	−7.5	−6.1	−5.4	−7.0	−4.7	−4.0	−4.2	−4.8	−4.7	−3.1
Colorado	−11.8	−11.2	−10.9	−10.7	−9.8	−9.3	−7.5	−7.3	−6.7	−5.5	−5.7	−5.0
Washington	−2.1	−2.0	−2.1	−2.3	−1.7	−1.9	−1.6	−.9	−.8	−.9	−1.1	−.1

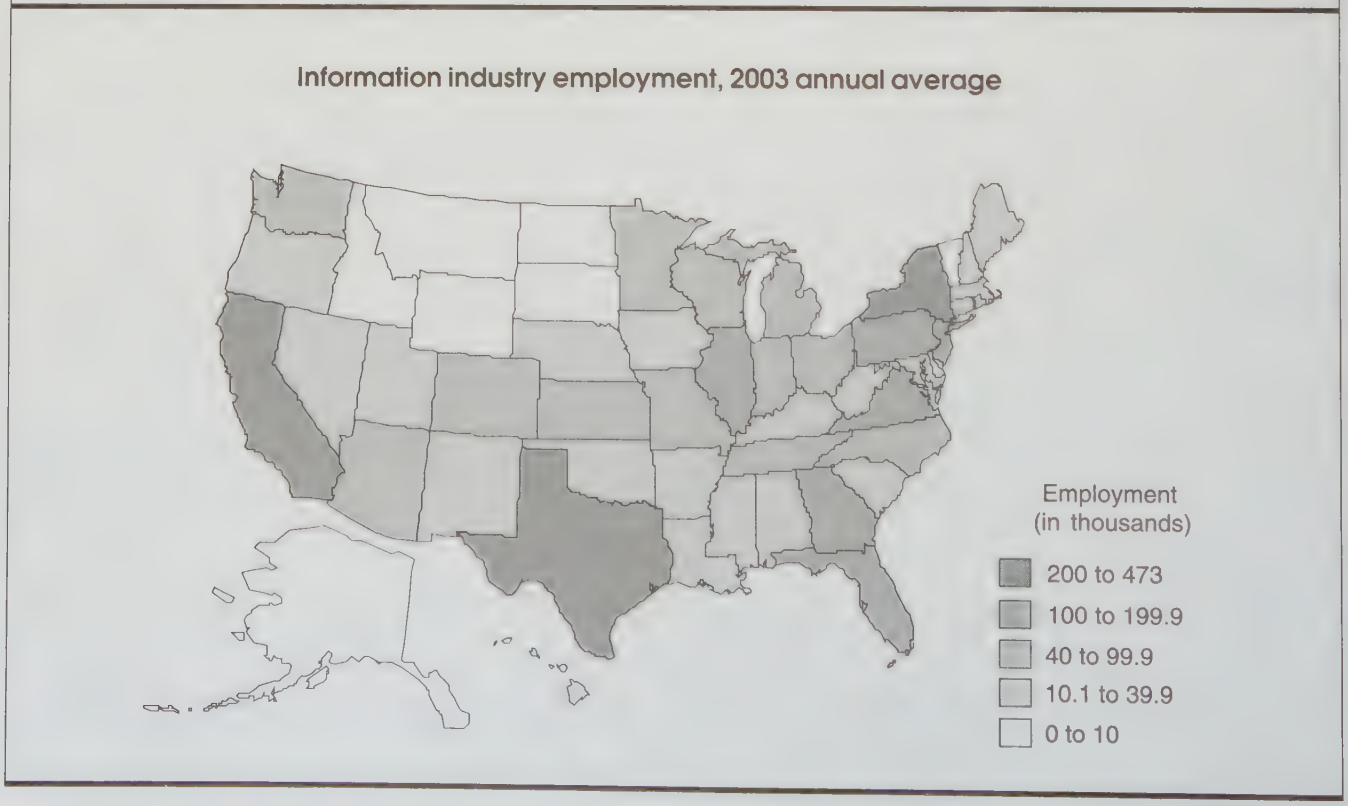
Table 5. Employment changes over the January–March 2004 period, United States and selected States, not seasonally adjusted

[Numbers in thousands]

Area and region	Over-the year net change			Over-the year percent change		
	January	February	March[1]	January	February	March[1]
United States	–98.0	–66.0	–56.0	–3.0	–2.0	–1.7
Northeast						
Massachusetts	–5.1	–4.7	–5.0	–5.4	–5.0	–5.4
New Jersey	–3.7	–2.7	–2.0	–3.6	–2.6	–1.9
New York	–6.7	–7.4	–1.9	–2.4	–2.6	–.7
Pennsylvania	–3.0	–2.6	–2.6	–2.4	–2.1	–2.1
South						
Flordia	–.6	–1.0	–2.9	–.3	–.6	–1.7
Georgia	–3.5	–2.1	–.8	–2.7	–1.6	–.6
North Carolina	–1.5	–.5	–.7	–2.0	–.7	–.9
Texas	–10.1	–8.8	–7.1	–4.2	–3.7	–3.0
Virginia	–.2	–1.3	–1.1	–.2	–1.3	–1.1
Midwest						
Illinois	–4.7	–5.1	–3.8	–3.4	–3.7	–2.8
Ohio	–2.6	–2.7	–2.6	–2.6	–2.8	–2.7
West						
California	–13.6	–19.8	–16.8	–2.8	–4.1	–3.5
Colorado	–3.8	–2.8	–3.0	–4.4	–3.3	–3.5
Washington	.5	1.4	2.3	.5	1.5	2.5

[1] Data are preliminary.

NOTE: February data for the United States are also preliminary.



Notes

[1] The nonfarm payroll series for States and metropolitan areas produced from the Current Employment Statistics (CES) program are based on the 2002 North American Industry Classification System (NAICS). NAICS is the product of a cooperative effort on the part of the statistical agencies of the United States, Canada, and Mexico. NAICS uses a production-oriented approach to categorize economic units. Units with similar production processes are classified in the same industry. See **http://www.bls.gov/sae/saewhatis.htm** for an overview of NAICS classification. All State nonfarm payroll employment estimates have a NAICS-based history extending back to January 1990, except for total nonfarm employment estimates which have retained their beginning date.

This report contains data for the Information sector (NAICS sector code 51), which includes software publishing, and both These nonfarm payroll data series reflect March 2003 benchmark levels, the completion of the conversion of the CES survey sample from a quota-based basis to a probability-based basis, and a modification of the seasonal adjustment process.

[2] State estimation procedures are designed to produce accurate data for each individual state. BLS independently develops a national employment series; State estimates are not forced to sum to national totals. Because each State series is subject to larger sampling and nonsampling errors than the national series, summing them cumulates individual State-level errors and can cause significant distortions at an aggregate level. Due to these statistical limitations, BLS does not compile a "sum-of-states" employment series, and cautions users that such a series is subject to a relatively large and volatile error structure.

[3] There are four geographic regions in the United States as defined by the U.S. Census Bureau: Northeast, South, Midwest, and West.

Self-employment around the world

In countries around the world, many people think that owning one's own business is a more desirable form of employment than working for others. A recent study by Dartmouth economist David G. Blanchflower, however, argues that self-employment may not be for everyone. Self-employed persons are highly motivated, driven individuals, who face considerable risks and often pay a high price for owning their own business; a price most people are not willing to pay.

Blanchflower presents data for 70 different countries, but focuses on comparisons between the United States and Europe. The study finds that in all countries, larger proportions of workers say they would prefer to work for themselves than actually do. In the United States, for example, 71 percent of the respondents to a survey covering 1997–98 indicated that they would prefer to work for themselves, but only about 7 percent actually were self-employed at the time. Similar disparities exist in Europe and the other countries, even when the proportion preferring self-employment is relatively small. At the same time, the proportion prefering self-employment varied considerably by country—from 27 percent in Norway to 80 percent in Poland.

Such findings present a paradox for economists, because economic theory suggests that as the labor market moves toward equilibrium, the demand for self-employment will meet the supply. Instead, it appears that in both Europe and the United States, there are numerous "frustrated entrepreneurs." This suggests that while many workers may be drawn to the *idea* of working for themselves, they face considerable constraints—personal and economic—against their becoming self-employed. They may also have an "unrealistically rosy view" of what it's like to run one's own business.

The study finds that self-employed workers are more satisfied with their jobs and pay than those who work for others. In addition, entrepreneurs tend to enjoy their work more than employees and spend less time commuting. On the other hand, the self-employed work many more hours than employees, often find their work stressful and exhausting, spend less time than they would like with their families, and find it difficult to devote time to nonwork activities. These findings support the author's contention that self-employment is not for everyone. Although many people would like the benefits of owning their own business, they would not be willing to accept the costs of self-employment.

Goods output *versus* manufacturing production

"A curious phenomenon of the 2001 recession was the sharp divergence between two arguably similar economic indicators," opens Charles Steindel in *Current Issues in Economics and Finance* from the New York Federal Reserve Bank. He goes on to analyze the divergent patterns of the Federal Reserve Board's own figures on manufacturing production and goods output as measured by the Bureau of Economic Analysis.

Manufacturing production, a component of the broader industrial production index, declined by about 6-¾ percent from June 2000 through December 2001. Over the next year and a half, there was very little growth in the index and it wasn't until the middle of 2003 that the series began to recover more strongly. In contrast, goods output, a component of the gross domestic product accounts, suffered only a mild decline in the recent recession and displayed what Steindel characterizes as "sustained growth afterward."

Steindel found that there was an underlying definitional difference between the two series that would be a key to understanding the difference in trends. The measure of goods output included the output of service sector firms that were involved in bringing the goods to market. This helps explain the long-term divergence of goods output and manufacturing production in terms of the role of services in the sale of goods. First, because imported goods typically require more services to bring to market, the growing significance of imports and the fact that the U.S. service component of their sale is included in the goods output measure tends to raise goods output relative to manufacturing production. Second, there is evidence that the service component of all goods output—domestic as well as import—has risen over time.

In the cyclical time frame, however, a somewhat different dynamic is at work. In most recessions and recovery cycles, capital goods production and sales are more volatile than consumer-oriented output and sales. Such was very much the case in the 2001 recession: capital goods spending fell 8.4 percent from the first to last quarters of 2001 while consumer spending actually increased. Given the differential in the service content of these sales categories—consumer goods incorporate more service content than capital goods—it follows that goods output, which includes post-factory services would trace a different course than manufacturing production, which excludes post-factory services.

Steindel concludes that where some have seen the current divergence between these two measures during the 2001 recession as unusual, what actually was different was the relatively close tracking between the two series in 1990–91. That recession was marked by an atypically large swing in consumer spending relative to capital goods spending. □

A visual essay:

Post-recession trends in nonfarm employment and related economic indicators

David Langdon, Rachel Krantz, and Michael Strople

- **Real GDP**
- **Corporate profits**
- **Unemployment Insurance (UI) claims**
- **The help-wanted index**
- **Manpower Inc.'s employment outlook survey**
- **Consumer confidence (appraisal of current employment conditions)**
- **Federal income tax withholdings**

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The economy entered a recovery in November 2001 following an 8-month recession, but the labor-market recovery began much later. Gross domestic product (GDP) and corporate profits had surged before payroll employment reached its August 2003 trough. Employment edged up by about 60,000 a month during the remainder of the year. Gains averaged about 225,000 a month during the first 5 months of 2004 before slowing in the summer. The post-recession disconnect between overall economic growth and the labor market was unusual. The following analysis reviews this apparent inconsistency, and also identifies a number of other broad labor-market indicators that paralleled the lagged recovery in payroll employment. Employment data used in this essay are from the Current Employment Statistics (CES) survey, a monthly survey of about 160,000 businesses and government agencies, which represent approximately 400,000 individual worksites. For more information on the CES, see *BLS Handbook of Methods*, chapter 2, on the Internet at **http://www.bls.gov/ces**

Real GDP

During and following the recessions of the early 1980s, the employment trend generally coincided with the trend in real GDP. In contrast, sustained employment growth lagged GDP growth by four quarters after the 1990–91 recession and by eight quarters after the 2001 recession. Overall, the downturn in employment associated with the 2001 recession was more prolonged than those associated with the recessions of the 1980s and 1990–91. (The National Bureau of Economic Research, the official arbiter of recessions, has designated these periods as recessions: January-July 1980, July 1981-November 1982, July 1990-March 1991, and March-November 2001.)

The 1990–91 and 2001 recessions were milder in terms of contracting GDP than those of the early 1980s. During the 1981–82 recession, employment contracted by 3 percent, compared with a mild 1 percent during the other three recessions since 1979.

1. Percent change in real gross domestic product and quarterly change in total nonfarm employment, seasonally adjusted

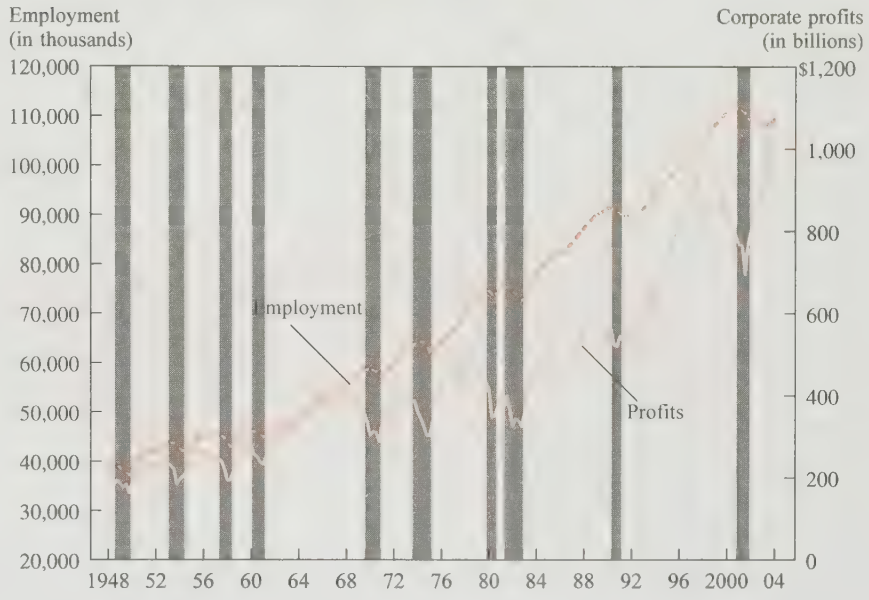
SOURCES: Bureau of Economic Analysis and BLS.

Corporate profits

Historically, private employment and real corporate profits behave similarly at the end of a recession. Both reach a trough as the recession ends and then recover quickly. At the end of the 1990–91 recession, both profits and employment continued to move in parallel, but were lagged in their recovery. The parallels broke down with the 2001 recession.

Leading into the 2001 recession, growth of corporate profits stalled and then exhibited a relatively sharp and deep decline. Employment declined as well during the recession, but not as drastically as corporate profits. Since reaching a trough in the third quarter of 2001, corporate profits have increased by 56 percent. Employment, on the other hand, remained essentially unchanged until late 2003. Rising productivity explains, at least in part, the divergence in profits and employment.

2. After-tax profits in constant (2000) dollars and quarterly averages of total private employment, seasonally adjusted

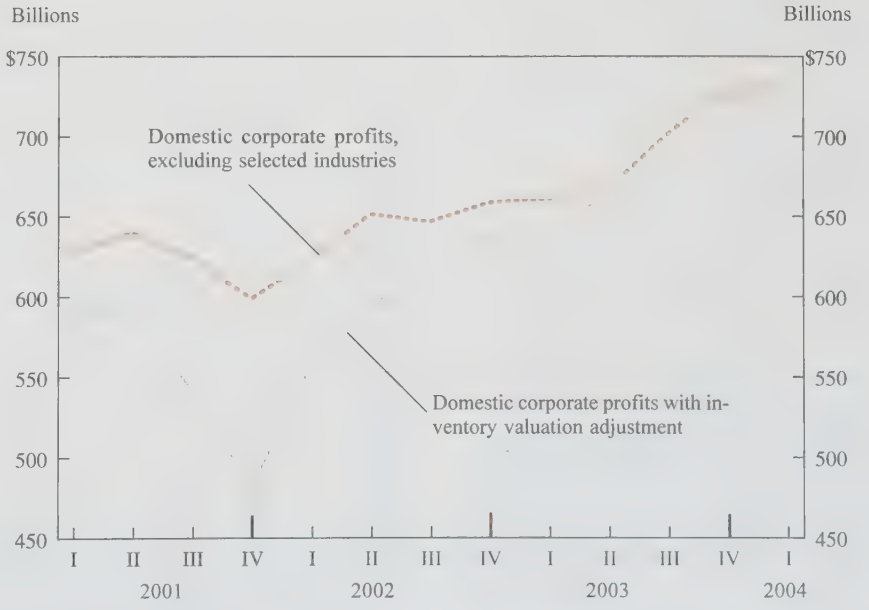


NOTE: Corporate profits were deflated using the Implicit price deflator for GDP, 2000 = 100. Shaded areas denote recessions.

SOURCES: Bureau of Economic Analysis and BLS.

Corporate profits declined substantially from the first to fourth quarter of 2001 and then recovered quickly. A large part of this swing is tied to the financial situation of three industry groups: information technology (IT)-related manufacturing, information industries, and transportation. (IT-related manufacturers produce information technology products. They are classified in computers and electronic products manufacturing [NAICS 334].) IT-related manufacturing and information industries felt the impact of the bursting technology bubble, whereas transportation was affected in part by the aftermath of the September 11th terrorist attacks. Corporate profits excluding those industries were much less volatile and much more in keeping with prior recessions.

3. Total domestic pre-tax profits and total excluding computer and electronic products, information, and transportation and warehousing

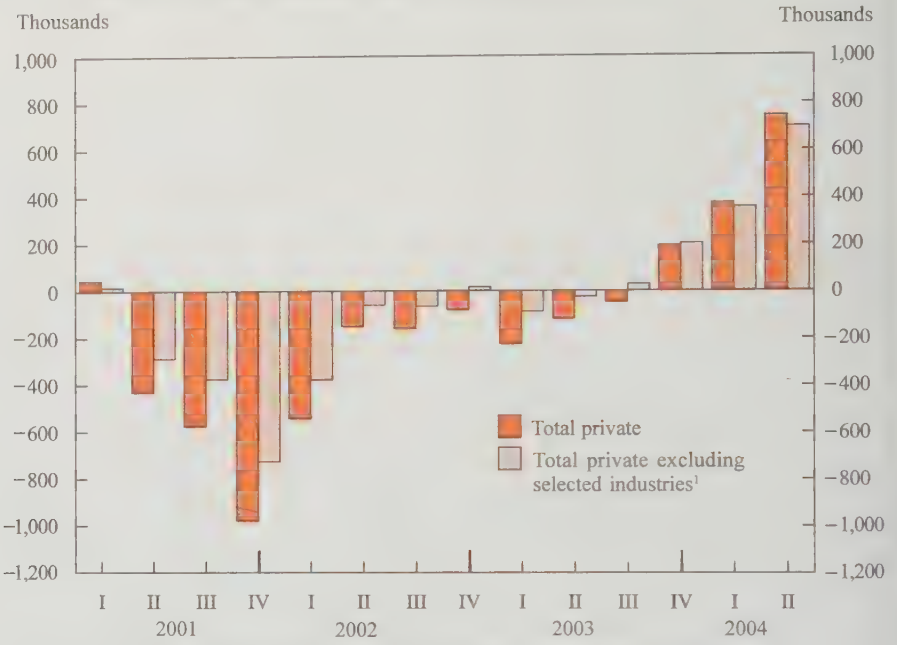


SOURCES: Bureau of Economic Analysis and authors' calculations.

Corporate profits

The difficult financial situation in computer and electronic products, information, and transportation and warehousing resulted in cost-cutting initiatives that included numerous layoffs. As a percentage of private employment, these three industries accounted for approximately 9 percent of employment in the first quarter of 2001; however, they accounted for approximately 41 percent of declines in private industry employment through the third quarter of 2003.

4. Quarterly employment changes in total private industries and total private excluding selected industries, seasonally adjusted



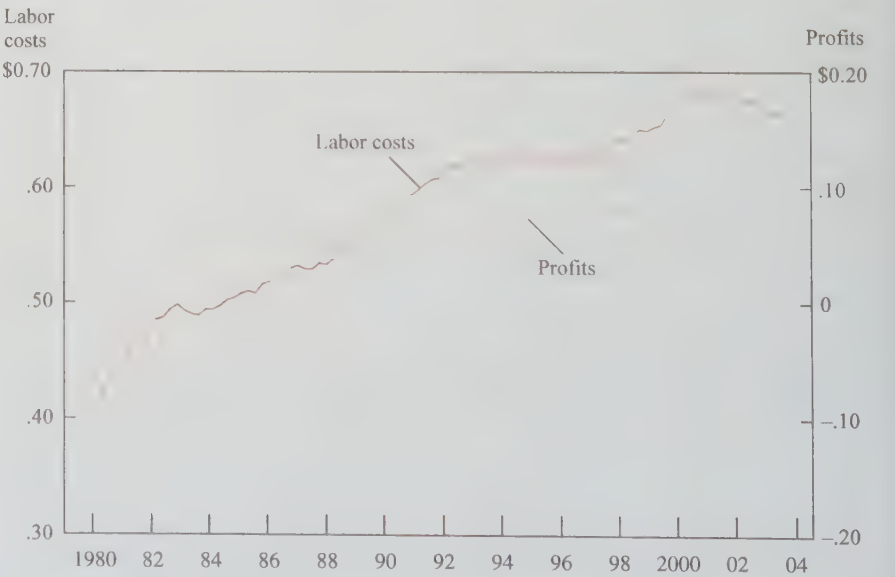
[1] Excludes computers and electronic products, information, and transportation and warehousing.

SOURCES: BLS and authors' calculations.

The third quarter of 1997 showed a distinct increase in labor costs per unit of real gross value added, which coincided with falling profits; this trend continued until the third quarter of 2001. (These measures are produced by the Bureau of Economic Analysis.) Over this timeframe, labor costs increased by 7 cents, while profits declined by 5 cents per unit of value added. The rising labor costs coincided with strong private employment growth, an average of 447,000 jobs a quarter.

This apparent tradeoff reversed itself in the fourth quarter of 2001. Unit profits began to increase, and unit labor costs decreased. From the third quarter of 2001 to the third quarter of 2003, profits per unit increased by 3 cents, while unit labor costs decreased by 2 cents. Private employment averaged declines of 288,000 per quarter over the same timeframe. This drop in unit labor costs is unusual, but is a way for firms to return to profit when their pricing power is weak. Price per unit of value added was flat between 2001 and 2003, so in order to increase profits, businesses cut costs, including the reduction of labor costs through layoffs.

5. After-tax profits and labor costs per unit of real gross value added of nonfinancial domestic corporate business, seasonally adjusted



NOTE: Profits are after taxes, inventory valuation adjustment, and capital consumption adjustment. The series are deflated such that the price of one unit of gross value added in 2000 equals $1.

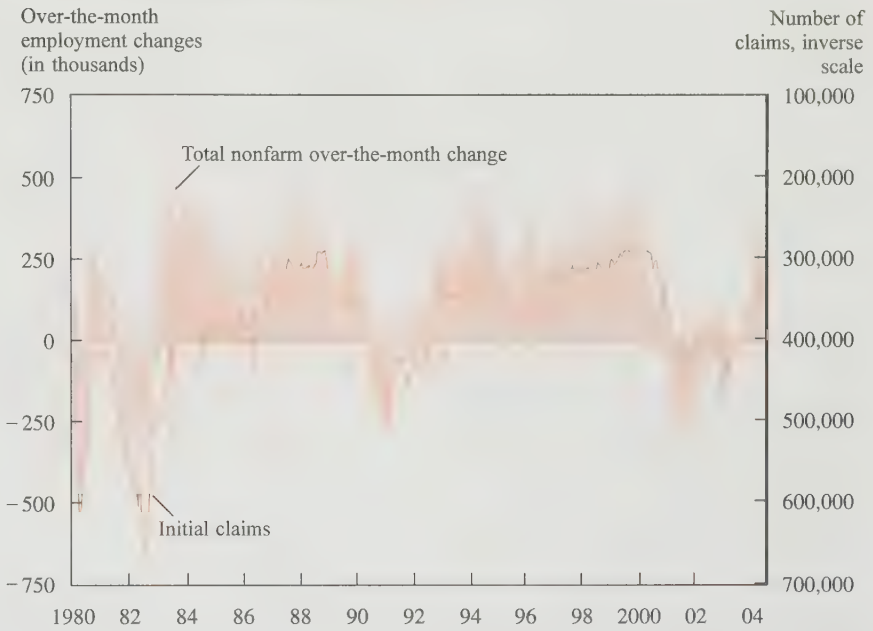
SOURCE: Bureau of Economic Analysis.

Unemployment Insurance (UI) claims

Initial UI claims and the over-the-month change of total nonfarm employment measure the flow of workers. The former measures the flow of laid-off workers claiming unemployment insurance compensation for the first week following a layoff. The latter measures the net flow of jobs onto payrolls. Not surprisingly, these flows are negatively correlated.

After the 2001 recession, initial UI claims hovered around 400,000 monthly, a somewhat lower level than during prior recessions. Claims did not fall and remain below 400,000 until the fourth quarter of 2003, coinciding with the return to growth in total nonfarm employment.

6. Monthly average of initial UI claims and monthly changes in total nonfarm employment, seasonally adjusted



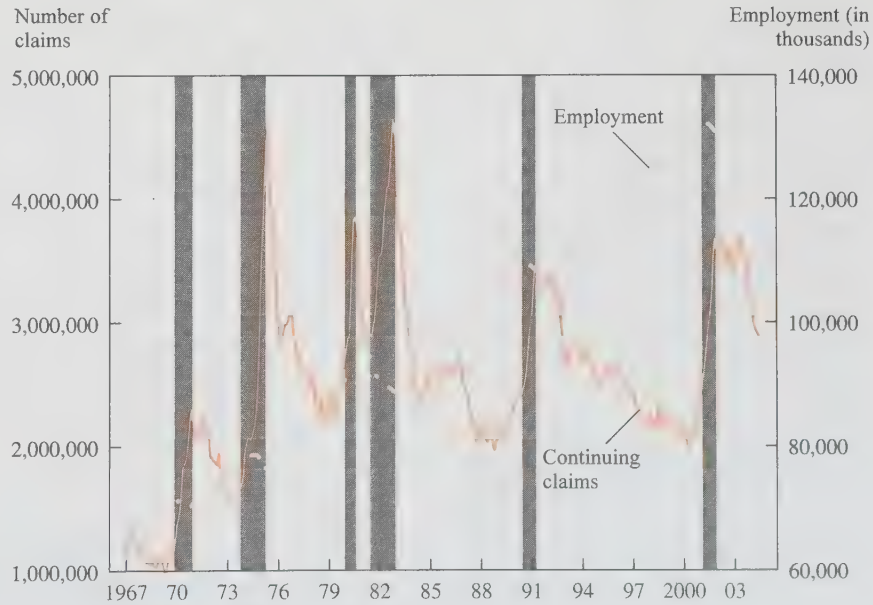
NOTE: The August and September 1983 over-the-month changes, –300,000 and +1.1 million, reflect a strike of 640,000 workers and their subsequent return.

SOURCES: DOL Employment and Training Administration and BLS.

The labor market's post-recovery stagnation is particularly evident in the continuing claims series. Like total nonfarm employment, continuing claims have tended to reach a turning point at the end of a recession, with employment then rising and claims declining. The pattern changed somewhat in the 1990–91 recession, as the drop in claims stalled between mid-1991 and mid-1992.

At the end of the 2001 recession, continuing claims reached 3.67 million, a plateau that extended through mid-2003. They did not decline steadily until September 2003, following the August trough in total nonfarm employment.

7. Monthly average of continuing UI claims and total nonfarm employment, seasonally adjusted



NOTE: Shaded areas denote recessions.

SOURCES: DOL Employment and Training Administration and BLS.

The help-wanted index

The help-wanted index measures monthly help-wanted advertising volume in 51 major newspapers across the United States. During the recessions of 1980, 1981–82, and 1990–91, a downturn in help-wanted advertising corresponded with job losses; conversely, an upturn in help-wanted advertising coincided with job gains. Newspaper job advertising began its most recent decline in 2000 and remained weak through 2003. Nonfarm payroll employment fell from early 2001 until late 2003.

Interestingly, the magnitude of decline in help-wanted advertising around the 2001 recession was more severe than the declines of the early 1980s and 1990s. In recent years, Internet-based job postings have become a popular method for employers to advertise job openings; some employers may substitute web-based postings for newspaper advertising. The shape of the help-wanted index indicates that newspaper job advertising notched up in early 2004, after showing little change in 2003. This small uptick coincided with strong gains in total nonfarm employment.

8. The help-wanted index and monthly changes in total nonfarm employment, seasonally adjusted

NOTE: The August and September 1983 over-the-month changes, –300,000 and +1.1 million, reflect a strike of 640,000 workers and their subsequent return.

SOURCES: The Conference Board and BLS.

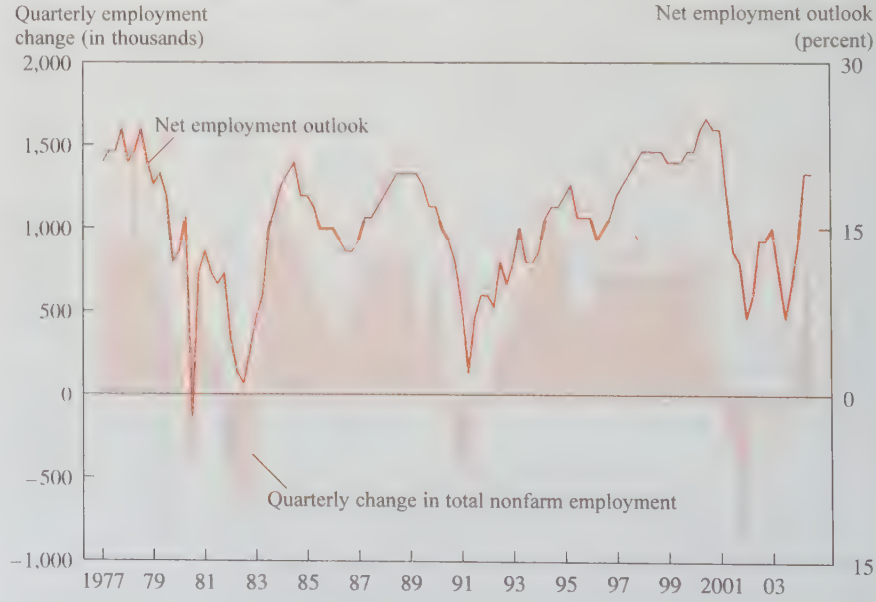
Manpower Inc. employment outlook survey

Manpower Inc.'s net employment outlook measures the difference between the percent of employers expecting to add jobs and those expecting to shed them. Curiously, in only one quarter since 1977 were there more firms planning to decrease their staffing levels than firms planning to increase them.

Trends in the net employment outlook correlate highly with quarterly changes in total nonfarm employment. A one-quarter lag in the employment outlook shows an even higher correlation. Not surprisingly, employers may develop their outlook for the upcoming quarter by looking at the one that has just ended.

Like total nonfarm employment, Manpower Inc.'s employment outlook behaved unusually after the 2001 recession. Although the outlook brightened somewhat in 2002, corresponding with relatively smaller declines in nonfarm employment, it dimmed again in 2003. At the end of the year and into early 2004, the outlook showed greater improvement, and total nonfarm employment began to recover.

9. Net employment outlook and quarterly changes in total nonfarm employment, seasonally adjusted



SOURCE: Manpower Inc. and BLS.

Consumer confidence (appraisal of current employment conditions)

As part of the Conference Board's monthly survey of Consumer confidence, respondents evaluate current employment conditions, judging jobs as either "plentiful," "not so plentiful," or "hard to get." Focusing just on those who see "plenty" of jobs, it is clear that the most recent economic recovery was not accompanied by an immediate improvement in the labor market. The proportion of respondents finding jobs plentiful recovered somewhat at the end of the 2001 recession, only to decline again during 2002 and through most of 2003. During the final months of 2003, it began to rise, coinciding with the first months of steady, though slow, growth in total nonfarm employment. It is worth remembering that BLS data may condition the public's perception of labor market conditions, especially in the case of people who are not actively looking, or know anyone actively looking, for work.

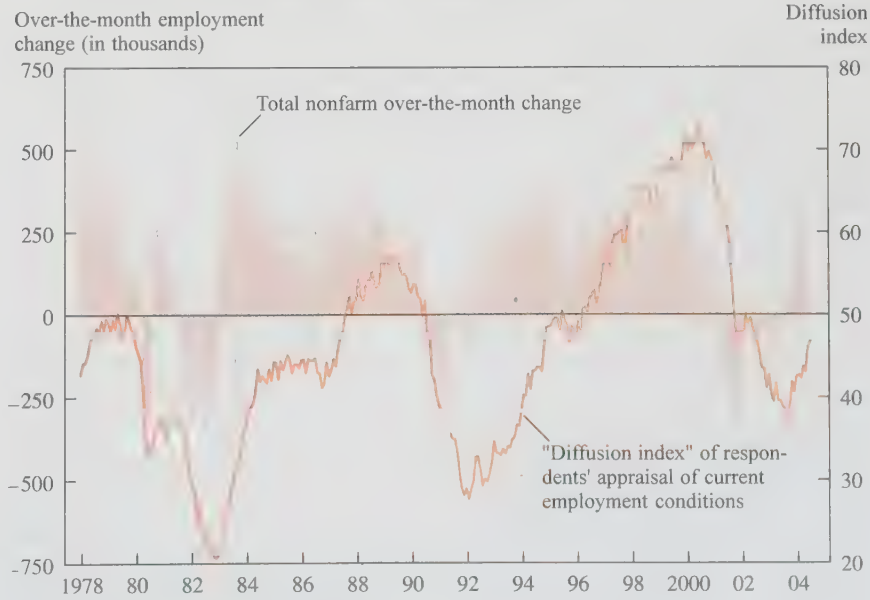
10. "Jobs plentiful" and monthly changes in total nonfarm employment, seasonally adjusted

NOTE: The August and September 1983 over-the-month changes, –300,000 and +1.1 million, reflect a strike of 640,000 workers and their subsequent return.

SOURCE: Conference Board and BLS.

A broader measure of consumer confidence in the labor market would take into account all people, not just those who see "plenty" of jobs. Such a measure—a pseudo-diffusion index—can be calculated by weighting the proportion of people who respond "plentiful" as 100, "not so plentiful" as 50, and "hard to get" as 0, and summing the results. This index highlights the growing lag between the end of recessions and the related labor market recovery. In 1982, consumers noted a 1-month lag. After the 1990–91 recession came an 11-month lag, followed by a somewhat fitful recovery; consumers did not identify sustained labor market improvement until mid-1992. The lag following the 2001 recession was 22 months, as the diffusion index bottomed out in September 2003. This pattern parallels that seen in CES data; employment hit a low in August 2003.

11. Net appraisal of current employment conditions and monthly changes in total nonfarm employment, seasonally adjusted



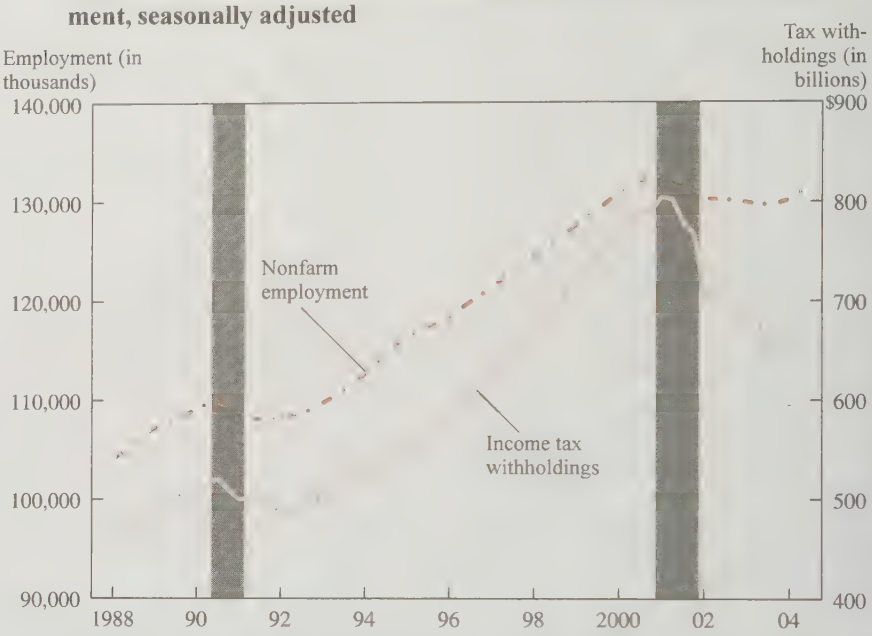
NOTE: The August and September 1983 over-the-month changes, –300,000 and +1.1 million, reflect a strike of 640,000 workers and their subsequent return.

SOURCE: Conference Board, BLS, and authors' calculations.

Income tax withholdings

Federal income tax withholdings and nonfarm employment had similar trends during the last two recessions. Both employment and withholdings peaked as the recessions began and reached low points after the recessions had ended. After the 1990–91 recession, there were no substantive job gains until the second quarter of 1992, coincident with a return to growth in income tax withholdings. There are not yet sufficient data to compare turning points in withholdings and employment for the period after the 2001 recession, although both data series declined through the third quarter of 2003 and have since regained some of their recession-related losses. Income tax cuts enacted in 2001 and 2003 are also a factor in the recent decline in withholdings.

12. Federal income tax withholdings and quarterly total nonfarm employment, seasonally adjusted



NOTE: Quarterly withholdings data are not available for years prior to 1988. Federal personal income tax withholdings were deflated using BEA's price index for Federal consumption expenditures and gross investment (2000 = 100). Shaded areas denote recessions.

SOURCES: Bureau of Economic Analysis, BLS, and authors' calculations.

Parenthood and employment

Families that Work: Policies for Reconciling Parenthood and Employment. By Janet C. Gornick and Marcia K. Meyers. New York, Russell Sage Foundation, 2003, 392 pp., $39.95/hardcover; $28/softcover.

"American families are struggling with a shared dilemma: if everyone is at the workplace, who will care for the children?"

That is how Janet C. Gornick and Marcia K. Meyers begin their summing up, and that dilemma—created by the decline of the male-breadwinner model of family organization and the steady rise in the labor force participation of women, particularly mothers of young children—is the central issue that they address in their comprehensive work.

The question is not unique to the United States. The same thing has occurred, to varying degrees, throughout the advanced industrial world. Because of the widespread nature of the phenomenon, a variety of trails have been blazed by a number of countries in reconciling the employment of mothers with family life.

Most of the empirical analysis in this book is cross-national. Gornick and Meyers compare 11 countries with the United States, organized into three fairly homogeneous groups: the four Nordic countries of Denmark, Finland, Norway, and Sweden; five other countries in Northern Continental Europe—Belgium, France, Germany, Luxembourg, and the Netherlands; and two mainly English-speaking countries—the United Kingdom and Canada. Countries in the groups vary widely in their family policies. Those of the Nordic countries are the most generous and egalitarian. The Continental countries, while liberal in their welfare measures, are more conservative with respect to traditional gender roles and adherence to market principles. Canada, and to a lesser extent the United Kingdom, most resembles the United States in that market principles remain dominant and family assistance is heavily needs-based.

The authors begin with a variety of well-documented indicators of family well-being. Among the indicators are measures of the rate of family poverty, incidence of low birth weight, mortality rates among infants and young children, teenage pregnancies and abortions, and eighth-grade achievement test scores in science and mathematics. With the exception of math achievement, where the U.K. eighth graders do worse, the United States is at the bottom in all the measures, usually followed by the other English-speaking countries.

Even though the Nordic countries have the highest employment rate of mothers—though not in total parental time spent at work, which is greatest in the United States—they fare best in most of these measures of family well-being. That should not be a surprise, suggest the authors, because they have also been the most successful in creating "dual-earner-dual-carer societies" with their "family-friendly" labor and childcare policies.

Only a passing nod is given to the possibility that other factors such as demographic characteristics, labor market structures, and cultural factors may also be important in explaining the different outcomes. If family friendliness of policies, as they measure it, is so crucial, then why does the United States, on the bottom of their scale, continue to have a higher fertility rate than the European countries? Few social outcomes could be more directly related to the family friendliness of the social environment than the choice to have a child.

The authors are unabashed advocates of European-style family policies for the United States, a fact that might color their interpretation of the data. In a chapter addressing objections to adopting European family policies, they suggest that great increases in non-marital childbearing in Europe, admittedly facilitated by generous social programs there, are not portentous for the United States because "the majority of unmarried parents in most European countries are in stable, cohabiting relationships." That may be true, but the fact remains that single-parent households, strictly defined, are very much on the rise in Europe. When 55 percent of all live births are to unmarried women, as was the case in Sweden in 2000, there is more than enough room for many of those births to be to women without partners or to women in less-than-stable relationships. Sweden's single-parent households make up 23 percent of all households with children. European proportions of single-parent households remain lower than in the United States, but the differential is closing. (See Gary Martin and Vladimir Kats, "Families and work in transition in 12 countries, 1980-2001," *Monthly Labor Review,* September 2003, tables 4 and 6.)

This study is perhaps most valuable for its extensive up-to-date tabulations, by country, of family-related practices and policies. The tabulations are drawn from an impressive array of national and international sources. Readers learn that paid maternity/parental leave in Europe ranges from 14 weeks in Germany to 52 weeks in Sweden, and that replacement of most or all wages is commonplace. In the United States, only five States have any form of paid maternity leave at all. All of the European countries have maximum weekly hours of work, ranging from 39 to 48. The United States and Canada have no such restriction. In every one of the European countries a minimum number of vacation days are prescribed by law. These minimums range from 20 to 25. The United States has no policy of required vacations, and the aver-

age number in practice is much less than 20. Early childhood education and care is provided by the government in all of the Continental European countries, and providers of the service are generally well paid and standards are high. In the United States, such services are generally private and expensive; the providers are relatively poorly paid; and standards are highly variable.

More than a book of advocacy, this is a prodigious work of scholarship in a growing and important interdisciplinary field. Of the 413 references, 198 are to works published in 2000 or later, 9 of which are forthcoming. With the breakup of the Soviet Union, the study of comparative economic systems has been on the decline. Studies such as these, which compare different aspects of mainly free-market economies, could breathe new life into the field.

—Gary Martin

Office of Productivity and Technology, Bureau of Labor Statistics

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This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics: series on labor force; employment; unemployment; labor compensation; consumer, producer, and international prices; productivity; international comparisons; and injury and illness statistics. In the notes that follow, the data in each group of tables are briefly described; key definitions are given; notes on the data are set forth; and sources of additional information are cited.

General notes

The following notes apply to several tables in this section:

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect on the data of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might prevent short-term evaluation of the statistical series. Tables containing data that have been adjusted are identified as "seasonally adjusted." (All other data are not seasonally adjusted.) Seasonal effects are estimated on the basis of current and past experiences. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years.

Seasonally adjusted data appear in tables 1–14, 17–21, 48, and 52. Seasonally adjusted labor force data in tables 1 and 4–9 were revised in the February 2004 issue of the *Review*. Seasonally adjusted establishment survey data shown in tables 1, 12–14, and 17 were revised in the March 2004 *Review*. A brief explanation of the seasonal adjustment methodology appears in "Notes on the data."

Revisions in the productivity data in table 54 are usually introduced in the September issue. Seasonally adjusted indexes and percent changes from month-to-month and quarter-to-quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All-Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data—such as the "real" earnings shown in table 14—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current-dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of $3 and a current price index number of 150, where 1982 = 100, the hourly rate expressed in 1982 dollars is $2 ($3/150 x 100 = $2). The $2 (or any other resulting values) are described as "real," "constant," or "1982" dollars.

Sources of information

Data that supplement the tables in this section are published by the Bureau in a variety of sources. Definitions of each series and notes on the data are contained in later sections of these Notes describing each set of data. For detailed descriptions of each data series, see *BLS Handbook of Methods*, Bulletin 2490. Users also may wish to consult *Major Programs of the Bureau of Labor Statistics*, Report 919. News releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule appearing on the back cover of this issue.

More information about labor force, employment, and unemployment data and the household and establishment surveys underlying the data are available in the Bureau's monthly publication, *Employment and Earnings*. Historical unadjusted and seasonally adjusted data from the household survey are available on the Internet:

http://www.bls.gov/cps/

Historically comparable unadjusted and seasonally adjusted data from the establishment survey also are available on the Internet:

http://www.bls.gov/ces/

Additional information on labor force data for areas below the national level are provided in the BLS annual report, *Geographic Profile of Employment and Unemployment*.

For a comprehensive discussion of the Employment Cost Index, see *Employment Cost Indexes and Levels, 1975–95*, BLS Bulletin 2466. The most recent data from the Employee Benefits Survey appear in the following Bureau of Labor Statistics bulletins: *Employee Benefits in Medium and Large Firms; Employee Benefits in Small Private Establishments;* and *Employee Benefits in State and Local Governments*.

More detailed data on consumer and producer prices are published in the monthly periodicals, *The CPI Detailed Report* and *Producer Price Indexes*. For an overview of the 1998 revision of the CPI, see the December 1996 issue of the *Monthly Labor Review*. Additional data on international prices appear in monthly news releases.

Listings of industries for which productivity indexes are available may be found on the Internet:

http://www.bls.gov/lpc/

For additional information on international comparisons data, see *International Comparisons of Unemployment*, Bulletin 1979.

Detailed data on the occupational injury and illness series are published in *Occupational Injuries and Illnesses in the United States, by Industry*, a BLS annual bulletin.

Finally, the *Monthly Labor Review* carries analytical articles on annual and longer term developments in labor force, employment, and unemployment; employee compensation and collective bargaining; prices; productivity; international comparisons; and injury and illness data.

Symbols

n.e.c. = not elsewhere classified.
n.e.s. = not elsewhere specified.
p = preliminary. To increase the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.
r = revised. Generally, this revision reflects the availability of later data, but also may reflect other adjustments.

Comparative Indicators

(Tables 1–3)

Comparative indicators tables provide an overview and comparison of major BLS statistical series. Consequently, although many of the included series are available monthly, all measures in these comparative tables are presented quarterly and annually.

Labor market indicators include employment measures from two major surveys and information on rates of change in compensation provided by the Employment Cost Index (ECI) program. The labor force participation rate, the employment-population ratio, and unemployment rates for major demographic groups based on the Current Population ("household") Survey are presented, while measures of employment and average weekly hours by major industry sector are given using nonfarm payroll data. The Employment Cost Index (compensation), by major sector and by bargaining status, is chosen from a variety of BLS compensation and wage measures because it provides a comprehensive measure of employer costs for hiring labor, not just outlays for wages, and it is not affected by employment shifts among occupations and industries.

Data on **changes in compensation, prices, and productivity** are presented in

table 2. Measures of rates of change of compensation and wages from the Employment Cost Index program are provided for all civilian nonfarm workers (excluding Federal and household workers) and for all private nonfarm workers. Measures of changes in consumer prices for all urban consumers; producer prices by stage of processing; overall prices by stage of processing; and overall export and import price indexes are given. Measures of productivity (output per hour of all persons) are provided for major sectors.

Alternative measures of wage and compensation rates of change, which reflect the overall trend in labor costs, are summarized in table 3. Differences in concepts and scope, related to the specific purposes of the series, contribute to the variation in changes among the individual measures.

Notes on the data

Definitions of each series and notes on the data are contained in later sections of these notes describing each set of data.

Employment and Unemployment Data

(Tables 1; 4–29)

Household survey data

Description of the series

Employment data in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 60,000 households selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

Definitions

Employed persons include (1) all those who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff are also counted among the unemployed. **The unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population. Persons **not in the labor force** are those not classified as employed or unemployed. This group includes discouraged workers, defined as persons who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify. The **civilian noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy. The **civilian labor force participation** rate is the proportion of the civilian noninstitutional population that is in the labor force. The **employment-population ratio** is employment as a percent of the civilian noninstitutional population.

Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the intercensal years. These adjustments affect the comparability of historical data. A description of these adjustments and their effect on the various data series appears in the Explanatory Notes of *Employment and Earnings*. For a discussion of changes introduced in January 2003, see "Revisions to the Current Population Survey Effective in January 2003" in the February 2003 issue of *Employment and Earnings* (available on the BLS Web site at: **http://www.bls.gov/cps/rvcps03.pdf**).

Effective in January 2003, BLS began using the X-12 ARIMA seasonal adjustment program to seasonally adjust national labor force data. This program replaced the X-11 ARIMA program which had been used since January 1980. See "Revision of Seasonally Adjusted Labor Force Series in 2003," in the February 2003 issue of *Employment and Earnings* (available on the BLS Web site at **http:www.bls.gov/cps/cpsrs.pdf**) for a discussion of the introduction of the use of X-12 ARIMA for seasonal adjustment of the labor force data and the effects that it had on the data.

At the beginning of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. The historical seasonally adjusted data usually are revised for only the most recent 5 years. In July, new seasonal adjustment factors, which incorporate the experience through June, are produced for the July–December period, but no revisions are made in the historical data.

FOR ADDITIONAL INFORMATION on national household survey data, contact the Division of Labor Force Statistics: (202) 691–6378.

Establishment survey data

Description of the series

Employment, hours, and earnings data in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by about 160,000 businesses and government agencies, which represent approximately 400,000 individual worksites and represent all industries except agriculture. The active CES sample covers approximately one-third of all nonfarm payroll workers. Industries are classified in accordance with the 2002 North American Industry Classification System. In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

Definitions

An **establishment** is an economic unit which produces goods or services (such as a factory or store) at a single location and is engaged in one type of economic activity.

Employed persons are all persons who received pay (including holiday and sick pay) for any part of the payroll period including the 12th day of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted

in each establishment which reports them.

Production workers in the goods-producing industries cover employees, up through the level of working supervisors, who engage directly in the manufacture or construction of the establishment's product. In private service-providing industries, data are collected for nonsupervisory workers, which include most employees except those in executive, managerial, and supervisory positions. Those workers mentioned in tables 11–16 include production workers in manufacturing and natural resources and mining; construction workers in construction; and nonsupervisory workers in all private service-providing industries. Production and nonsupervisory workers account for about four-fifths of the total employment on private nonagricultural payrolls.

Earnings are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments. **Real earnings** are earnings adjusted to reflect the effects of changes in consumer prices. The deflator for this series is derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Hours represent the average weekly hours of production or nonsupervisory workers for which pay was received, and are different from standard or scheduled hours. **Overtime hours** represent the portion of average weekly hours which was in excess of regular hours and for which overtime premiums were paid.

The **Diffusion Index** represents the percent of industries in which employment was rising over the indicated period, plus one-half of the industries with unchanged employment; 50 percent indicates an equal balance between industries with increasing and decreasing employment. In line with Bureau practice, data for the 1-, 3-, and 6-month spans are seasonally adjusted, while those for the 12-month span are unadjusted. Table 17 provides an index on private nonfarm employment based on 278 industries, and a manufacturing index based on 84 industries. These indexes are useful for measuring the dispersion of economic gains or losses and are also economic indicators.

Notes on the data

Establishment survey data are annually adjusted to comprehensive counts of employment (called "benchmarks"). The March 2003 benchmark was introduced in February 2004 with the release of data for January 2004, published in the March 2004 issue of the *Review*. With the release in June 2003, CES completed a conversion from the Standard Industrial Classification (SIC) system to the North American Industry Classification System (NAICS) and completed the transition from its original quota sample design to a probability-based sample design. The industry-coding update included reconstruction of historical estimates in order to preserve time series for data users. Normally 5 years of seasonally adjusted data are revised with each benchmark revision. However, with this release, the entire new time series history for all CES data series were re-seasonally adjusted due to the NAICS conversion, which resulted in the revision of all CES time series.

Also in June 2003, the CES program introduced concurrent seasonal adjustment for the national establishment data. Under this methodology, the first preliminary estimates for the current reference month and the revised estimates for the 2 prior months will be updated with concurrent factors with each new release of data. Concurrent seasonal adjustment incorporates all available data, including first preliminary estimates for the most current month, in the adjustment process. For additional information on all of the changes introduced in June 2003, see the June 2003 issue of *Employment and Earnings* and "Recent changes in the national Current Employment Statistics survey," *Monthly Labor Review*, June 2003, pp. 3–13.

Revisions in State data (table 11) occurred with the publication of January 2003 data. For information on the revisions for the State data, see the March and May 2003 issues of *Employment and Earnings*, and "Recent changes in the State and Metropolitan Area CES survey," *Monthly Labor Review*, June 2003, pp. 14–19.

Beginning in June 1996, the BLS uses the X-12-ARIMA methodology to seasonally adjust establishment survey data. This procedure, developed by the Bureau of the Census, controls for the effect of varying survey intervals (also known as the 4- versus 5-week effect), thereby providing improved measurement of over-the-month changes and underlying economic trends. Revisions of data, usually for the most recent 5-year period, are made once a year coincident with the benchmark revisions.

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review*). When all returns have been received, the estimates are revised and published as "final" (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Fourth-quarter data are published as preliminary in January and February and as final in March.

FOR ADDITIONAL INFORMATION on establishment survey data, contact the Division of Current Employment Statistics: (202) 691–6555.

Unemployment data by State

Description of the series

Data presented in this section are obtained from the Local Area Unemployment Statistics (LAUS) program, which is conducted in cooperation with State employment security agencies.

Monthly estimates of the labor force, employment, and unemployment for States and sub-State areas are a key indicator of local economic conditions, and form the basis for determining the eligibility of an area for benefits under Federal economic assistance programs such as the Job Training Partnership Act. Seasonally adjusted unemployment rates are presented in table 10. Insofar as possible, the concepts and definitions underlying these data are those used in the national estimates obtained from the CPS.

Notes on the data

Data refer to State of residence. Monthly data for all States and the District of Columbia are derived using standardized procedures established by BLS. Once a year, estimates are revised to new population controls, usually with publication of January estimates, and benchmarked to annual average CPS levels.

FOR ADDITIONAL INFORMATION on data in this series, call (202) 691–6392 (table 10) or (202) 691–6559 (table 11).

Quarterly Census of Employment and Wages

Description of the series

Employment, wage, and establishment data in this section are derived from the quarterly tax reports submitted to State employment security agencies by private and State and local government employers sub-

ject to State unemployment insurance (UI) laws and from Federal, agencies subject to the Unemployment Compensation for Federal Employees (UCFE) program. Each quarter, State agencies edit and process the data and send the information to the Bureau of Labor Statistics.

The Quarterly Census of Employment and Wages (QCEW) data, also referred as ES-202 data, are the most complete enumeration of employment and wage information by industry at the national, State, metropolitan area, and county levels. They have broad economic significance in evaluating labor market trends and major industry developments.

Definitions

In general, the Quarterly Census of Employment and Wages monthly employment data represent the number of **covered workers** who worked during, or received pay for, the pay period that included the 12th day of the month. **Covered private industry employment** includes most corporate officials, executives, supervisory personnel, professionals, clerical workers, wage earners, piece workers, and part-time workers. It excludes proprietors, the unincorporated self-employed, unpaid family members, and certain farm and domestic workers. Certain types of nonprofit employers, such as religious organizations, are given a choice of coverage or exclusion in a number of States. Workers in these organizations are, therefore, reported to a limited degree.

Persons on paid sick leave, paid holiday, paid vacation, and the like, are included. Persons on the payroll of more than one firm during the period are counted by each UI-subject employer if they meet the employment definition noted earlier. The employment count excludes workers who earned no wages during the entire applicable pay period because of work stoppages, temporary layoffs, illness, or unpaid vacations.

Federal employment data are based on reports of monthly employment and quarterly wages submitted each quarter to State agencies for all Federal installations with employees covered by the Unemployment Compensation for Federal Employees (UCFE) program, except for certain national security agencies, which are omitted for security reasons. Employment for all Federal agencies for any given month is based on the number of persons who worked during or received pay for the pay period that included the 12th of the month.

An **establishment** is an economic unit, such as a farm, mine, factory, or store, that produces goods or provides services. It is typically at a single physical location and engaged in one, or predominantly one, type of economic activity for which a single industrial classification may be applied. Occasionally, a single physical location encompasses two or more distinct and significant activities. Each activity should be reported as a separate establishment if separate records are kept and the various activities are classified under different NAICS industries.

Most employers have only one establishment; thus, the establishment is the predominant reporting unit or statistical entity for reporting employment and wages data. Most employers, including State and local governments who operate more than one establishment in a State, file a Multiple Worksite Report each quarter, in addition to their quarterly UI report. The Multiple Worksite Report is used to collect separate employment and wage data for each of the employer's establishments, which are not detailed on the UI report. Some very small multi-establishment employers do not file a Multiple Worksite Report. When the total employment in an employer's secondary establishments (all establishments other than the largest) is 10 or fewer, the employer generally will file a consolidated report for all establishments. Also, some employers either cannot or will not report at the establishment level and thus aggregate establishments into one consolidated unit, or possibly several units, though not at the establishment level.

For the Federal Government, the reporting unit is the **installation**: a single location at which a department, agency, or other government body has civilian employees. Federal agencies follow slightly different criteria than do private employers when breaking down their reports by installation. They are permitted to combine as a single statewide unit: 1) all installations with 10 or fewer workers, and 2) all installations that have a combined total in the State of fewer than 50 workers. Also, when there are fewer than 25 workers in all secondary installations in a State, the secondary installations may be combined and reported with the major installation. Last, if a Federal agency has fewer than five employees in a State, the agency headquarters office (regional office, district office) serving each State may consolidate the employment and wages data for that State with the data reported to the State in which the headquarters is located. As a result of these reporting rules, the number of reporting units is always larger than the number of employers (or government agencies) but smaller than the number of actual establishments (or installations).

Data reported for the first quarter are tabulated into **size** categories ranging from worksites of very small size to those with 1,000 employees or more. The size category is determined by the establishment's March employment level. It is important to note that each establishment of a multi-establishment firm is tabulated separately into the appropriate size category. The total employment level of the reporting multi-establishment firm is not used in the size tabulation.

Covered employers in most States report total **wages** paid during the calendar quarter, regardless of when the services were performed. A few State laws, however, specify that wages be reported for, or based on the period during which services are performed rather than the period during which compensation is paid. Under most State laws or regulations, wages include bonuses, stock options, the cash value of meals and lodging, tips and other gratuities, and, in some States, employer contributions to certain deferred compensation plans such as 401(k) plans.

Covered employer contributions for old-age, survivors, and disability insurance (OASDI), health insurance, unemployment insurance, workers' compensation, and private pension and welfare funds are not reported as wages. Employee contributions for the same purposes, however, as well as money withheld for income taxes, union dues, and so forth, are reported even though they are deducted from the worker's gross pay.

Wages of covered Federal workers represent the gross amount of all payrolls for all pay periods ending within the quarter. This includes cash allowances, the cash equivalent of any type of remuneration, severance pay, withholding taxes, and retirement deductions. Federal employee remuneration generally covers the same types of services as for workers in private industry.

Average annual wage per employee for any given industry are computed by dividing total annual wages by annual average employment. A further division by 52 yields average weekly wages per employee. Annual pay data only approximate annual earnings because an individual may not be employed by the same employer all year or may work for more than one employer at a time.

Average weekly or annual wage is affected by the ratio of full-time to part-time workers as well as the number of individuals in high-paying and low-paying occupations. When average pay levels between States and industries are compared, these factors should be taken into consideration. For example, industries characterized by high proportions of part-time workers will

show average wage levels appreciably less than the weekly pay levels of regular full-time employees in these industries. The opposite effect characterizes industries with low proportions of part-time workers, or industries that typically schedule heavy weekend and overtime work. Average wage data also may be influenced by work stoppages, labor turnover rates, retroactive payments, seasonal factors, bonus payments, and so on.

Notes on the data

Beginning with the release of data for 2001, publications presenting data from the Covered Employment and Wages program have switched to the 2002 version of the North American Industry Classification System (NAICS) as the basis for the assignment and tabulation of economic data by industry. NAICS is the product of a cooperative effort on the part of the statistical agencies of the United States, Canada, and Mexico. Due to difference in NAICS and Standard Industrial Classification (SIC) structures, industry data for 2001 is not comparable to the SIC-based data for earlier years.

Effective January 2001, the program began assigning Indian Tribal Councils and related establishments to local government ownership. This BLS action was in response to a change in Federal law dealing with the way Indian Tribes are treated under the Federal Unemployment Tax Act. This law requires federally recognized Indian Tribes to be treated similarly to State and local governments. In the past, the Covered Employment and Wage (CEW) program coded Indian Tribal Councils and related establishments in the private sector. As a result of the new law, CEW data reflects significant shifts in employment and wages between the private sector and local government from 2000 to 2001. Data also reflect industry changes. Those accounts previously assigned to civic and social organizations were assigned to tribal governments. There were no required industry changes for related establishments owned by these Tribal Councils. These tribal business establishments continued to be coded according to the economic activity of that entity.

To insure the highest possible quality of data, State employment security agencies verify with employers and update, if necessary, the industry, location, and ownership classification of all establishments on a 3-year cycle. Changes in establishment classification codes resulting from the verification process are introduced with the data reported for the first quarter of the year. Changes resulting from improved employer reporting also are introduced in the first quarter. For these reasons, some data, especially at more detailed geographic levels, may not be strictly comparable with earlier years.

County definitions are assigned according to Federal Information Processing Standards Publications as issued by the National Institute of Standards and Technology. Areas shown as counties include those designated as independent cities in some jurisdictions and, in Alaska, those areas designated by the Census Bureau where counties have not been created. County data also are presented for the New England States for comparative purposes, even though townships are the more common designation used in New England (and New Jersey).

The Office of Management and Budget (OMB) defines metropolitan areas for use in Federal statistical activities and updates these definitions as needed. Data in this table use metropolitan area criteria established by OMB in definitions issued June 30, 1999 (OMB Bulletin No. 99-04). These definitions reflect information obtained from the 1990 Decennial Census and the 1998 U.S. Census Bureau population estimate. A complete list of metropolitan area definitions is available from the National Technical Information Service (NTIS), Document Sales, 5205 Port Royal Road, Springfield, Va. 22161, telephone 1-800-553-6847.

OMB defines metropolitan areas in terms of entire counties, except in the six New England States where they are defined in terms of cities and towns. New England data in this table, however, are based on a county concept defined by OMB as New England County Metropolitan Areas (NECMA) because county-level data are the most detailed available from the Quarterly Census of Employment and Wages. The NECMA is a county-based alternative to the city- and town-based metropolitan areas in New England. The NECMA for a Metropolitan Statistical Area (MSA) include: (1) the county containing the first-named city in that MSA title (this county may include the first-named cities of other MSA, and (2) each additional county having at least half its population in the MSA in which first-named cities are in the county identified in step 1. The NECMA is officially defined areas that are meant to be used by statistical programs that cannot use the regular metropolitan area definitions in New England.

FOR ADDITIONAL INFORMATION on the covered employment and wage data, contact the Division of Administrative Statistics and Labor Turnover at (202) 691–6567.

Job Openings and Labor Turnover Survey

Description of the series

Data for the **Job Openings and Labor Turnover Survey** (JOLTS) are collected and compiled from a sample of 16,000 business establishments. Each month, data are collected for total employment, job openings, hires, quits, layoffs and discharges, and other separations. The JOLTS program covers all private nonfarm establishments such as factories, offices, and stores, as well as Federal, State, and local government entities in the 50 States and the District of Columbia. The JOLTS sample design is a random sample drawn from a universe of more than eight million establishments compiled as part of the operations of the Quarterly Census of Employment and Wages, or QCEW, program. This program includes all employers subject to State unemployment insurance (UI) laws and Federal agencies subject to Unemployment Compensation for Federal Employees (UCFE).

The sampling frame is stratified by ownership, region, industry sector, and size class. Large firms fall into the sample with virtual certainty. JOLTS total employment estimates are controlled to the employment estimates of the Current Employment Statistics (CES) survey. A ratio of CES to JOLTS employment is used to adjust the levels for all other JOLTS data elements. Rates then are computed from the adjusted levels.

The monthly JOLTS data series begin with December 2000. Not seasonally adjusted data on job openings, hires, total separations, quits, layoffs and discharges, and other separations levels and rates are available for the total nonfarm sector, 16 private industry divisions and 2 government divisions based on the North American Industry Classification System (NAICS), and four geographic regions. Seasonally adjusted data on job openings, hires, total separations, and quits levels and rates are available for the total nonfarm sector, selected industry sectors, and four geographic regions.

Definitions

Establishments submit **job openings** information for the last business day of the reference month. A job opening requires that (1) a specific position exists and there is work available for that position; and (2) work could start within 30 days regardless of whether a suitable candidate is found; and (3) the employer is actively recruiting from outside the establishment to fill the position. Included are full-time, part-time, permanent,

short-term, and seasonal openings. Active recruiting means that the establishment is taking steps to fill a position by advertising in newspapers or on the Internet, posting help-wanted signs, accepting applications, or using other similar methods.

Jobs to be filled only by internal transfers, promotions, demotions, or recall from layoffs are excluded. Also excluded are jobs with start dates more than 30 days in the future, jobs for which employees have been hired but have not yet reported for work, and jobs to be filled by employees of temporary help agencies, employee leasing companies, outside contractors, or consultants. The job openings rate is computed by dividing the number of job openings by the sum of employment and job openings, and multiplying that quotient by 100.

Hires are the total number of additions to the payroll occurring at any time during the reference month, including both new and rehired employees and full-time and part-time, permanent, short-term and seasonal employees, employees recalled to the location after a layoff lasting more than 7 days, on-call or intermittent employees who returned to work after having been formally separated, and transfers from other locations. The hires count does not include transfers or promotions within the reporting site, employees returning from strike, employees of temporary help agencies or employee leasing companies, outside contractors, or consultants. The hires rate is computed by dividing the number of hires by employment, and multiplying that quotient by 100.

Separations are the total number of terminations of employment occurring at any time during the reference month, and are reported by type of separation—quits, layoffs and discharges, and other separations. Quits are voluntary separations by employees (except for retirements, which are reported as other separations). Layoffs and discharges are involuntary separations initiated by the employer and include layoffs with no intent to rehire, formal layoffs lasting or expected to last more than 7 days, discharges resulting from mergers, downsizing, or closings, firings or other discharges for cause, terminations of permanent or short-term employees, and terminations of seasonal employees. Other separations include retirements, transfers to other locations, deaths, and separations due to disability. Separations do not include transfers within the same location or employees on strike.

The separations rate is computed by dividing the number of separations by employment, and multiplying that quotient by 100. The quits, layoffs and discharges, and other separations rates are computed similarly, dividing the number by employment and multiplying by 100.

Notes on the data

The JOLTS data series on job openings, hires, and separations are relatively new. The full sample is divided into panels, with one panel enrolled each month. A full complement of panels for the original data series based on the 1987 Standard Industrial Classification (SIC) system was not completely enrolled in the survey until January 2002. The supplemental panels of establishments needed to create NAICS estimates were not completely enrolled until May 2003. The data collected up until those points are from less than a full sample. Therefore, estimates from earlier months should be used with caution, as fewer sampled units were reporting data at that time.

In March 2002, BLS procedures for collecting hires and separations data were revised to address possible underreporting. As a result, JOLTS hires and separations estimates for months prior to March 2002 may not be comparable with estimates for March 2002 and later.

The Federal Government reorganization that involved transferring approximately 180,000 employees to the new Department of Homeland Security is not reflected in the JOLTS hires and separations estimates for the Federal Government. The Office of Personnel Management's record shows these transfers were completed in March 2003. The inclusion of transfers in the JOLTS definitions of hires and separations is intended to cover ongoing movements of workers between establishments. The Department of Homeland Security reorganization was a massive one-time event, and the inclusion of these intergovernmental transfers would distort the Federal Government time series.

Data users should note that seasonal adjustment of the JOLTS series is conducted with fewer data observations than is customary. The historical data, therefore, may be subject to larger than normal revisions. Because the seasonal patterns in economic data series typically emerge over time, the standard use of moving averages as seasonal filters to capture these effects requires longer series than are currently available. As a result, the stable seasonal filter option is used in the seasonal adjustment of the JOLTS data. When calculating seasonal factors, this filter takes an average for each calendar month after detrending the series. The stable seasonal filter assumes that the seasonal factors are fixed; a necessary assumption until sufficient data are available. When the stable seasonal filter is no longer needed, other program features also may be introduced, such as outlier adjustment and extended diagnostic testing. Additionally, it is expected that more series, such as layoffs and discharges and additional industries, may be seasonally adjusted when more data are available.

JOLTS hires and separations estimates cannot be used to exactly explain net changes in payroll employment. Some reasons why it is problematic to compare changes in payroll employment with JOLTS hires and separations, especially on a monthly basis, are: (1) the reference period for payroll employment is the pay period including the 12th of the month, while the reference period for hires and separations is the calendar month; and (2) payroll employment can vary from month to month simply because part-time and on-call workers may not always work during the pay period that includes the 12th of the month. Additionally, research has found that some reporters systematically underreport separations relative to hires due to a number of factors, including the nature of their payroll systems and practices. The shortfall appears to be about 2 percent or less over a 12-month period.

FOR ADDITIONAL INFORMATION on the Job Openings and Labor Turnover Survey, contact the Division of Administrative Statistics and Labor Turnover at (202) 961-5870.

Compensation and Wage Data

(Tables 1–3; 30–36)

Compensation and waged data are gathered by the Bureau from business establishments, State and local governments, labor unions, collective bargaining agreements on file with the Bureau, and secondary sources.

Employment Cost Index

Description of the series

The **Employment Cost Index** (ECI) is a quarterly measure of the rate of change in compensation per hour worked and includes wages, salaries, and employer costs of employee benefits. It uses a fixed market basket of labor—similar in concept to the Consumer Price Index's fixed market basket of goods and services—to measure change over time in employer costs of employing labor.

Statistical series on total compensation

costs, on wages and salaries, and on benefit costs are available for private nonfarm workers excluding proprietors, the self-employed, and household workers. The total compensation costs and wages and salaries series are also available for State and local government workers and for the civilian nonfarm economy, which consists of private industry and State and local government workers combined. Federal workers are excluded.

The Employment Cost Index probability sample consists of about 4,400 private nonfarm establishments providing about 23,000 occupational observations and 1,000 State and local government establishments providing 6,000 occupational observations selected to represent total employment in each sector. On average, each reporting unit provides wage and compensation information on five well-specified occupations. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Beginning with June 1986 data, fixed employment weights from the 1980 Census of Population are used each quarter to calculate the civilian and private indexes and the index for State and local governments. (Prior to June 1986, the employment weights are from the 1970 Census of Population.) These fixed weights, also used to derive all of the industry and occupation series indexes, ensure that changes in these indexes reflect only changes in compensation, not employment shifts among industries or occupations with different levels of wages and compensation. For the bargaining status, region, and metropolitan/nonmetropolitan area series, however, employment data by industry and occupation are not available from the census. Instead, the 1980 employment weights are reallocated within these series each quarter based on the current sample. Therefore, these indexes are not strictly comparable to those for the aggregate, industry, and occupation series.

Definitions

Total compensation costs include wages, salaries, and the employer's costs for employee benefits.

Wages and salaries consist of earnings before payroll deductions, including production bonuses, incentive earnings, commissions, and cost-of-living adjustments.

Benefits include the cost to employers for paid leave, supplemental pay (including nonproduction bonuses), insurance, retirement and savings plans, and legally required benefits (such as Social Security, workers' compensation, and unemployment insurance).

Excluded from wages and salaries and employee benefits are such items as payment-in-kind, free room and board, and tips.

Notes on the data

The Employment Cost Index for changes in wages and salaries in the private nonfarm economy was published beginning in 1975. Changes in total compensation cost—wages and salaries and benefits combined—were published beginning in 1980. The series of changes in wages and salaries and for total compensation in the State and local government sector and in the civilian nonfarm economy (excluding Federal employees) were published beginning in 1981. Historical indexes (June 1981=100) are available on the Internet:

http://www.bls.gov/ect/

FOR ADDITIONAL INFORMATION on the Employment Cost Index, contact the Office of Compensation Levels and Trends: (202) 691–6199.

Employee Benefits Survey

Description of the series

Employee benefits data are obtained from the Employee Benefits Survey, an annual survey of the incidence and provisions of selected benefits provided by employers. The survey collects data from a sample of approximately 9,000 private sector and State and local government establishments. The data are presented as a percentage of employees who participate in a certain benefit, or as an average benefit provision (for example, the average number of paid holidays provided to employees per year). Selected data from the survey are presented in table 34 for medium and large private establishments and in table 35 for small private establishments and State and local government.

The survey covers paid leave benefits such as holidays and vacations, and personal, funeral, jury duty, military, family, and sick leave; short-term disability, long-term disability, and life insurance; medical, dental, and vision care plans; defined benefit and defined contribution plans; flexible benefits plans; reimbursement accounts; and unpaid family leave.

Also, data are tabulated on the incidence of several other benefits, such as severance pay, child-care assistance, wellness programs, and employee assistance programs.

Definitions

Employer-provided benefits are benefits that are financed either wholly or partly by the employer. They may be sponsored by a union or other third party, as long as there is some employer financing. However, some benefits that are fully paid for by the employee also are included. For example, long-term care insurance and postretirement life insurance paid entirely by the employee are included because the guarantee of insurability and availability at group premium rates are considered a benefit.

Participants are workers who are covered by a benefit, whether or not they use that benefit. If the benefit plan is financed wholly by employers and requires employees to complete a minimum length of service for eligibility, the workers are considered participants whether or not they have met the requirement. If workers are required to contribute towards the cost of a plan, they are considered participants only if they elect the plan and agree to make the required contributions.

Defined benefit pension plans use predetermined formulas to calculate a retirement benefit (if any), and obligate the employer to provide those benefits. Benefits are generally based on salary, years of service, or both.

Defined contribution plans generally specify the level of employer and employee contributions to a plan, but not the formula for determining eventual benefits. Instead, individual accounts are set up for participants, and benefits are based on amounts credited to these accounts.

Tax-deferred savings plans are a type of defined contribution plan that allow participants to contribute a portion of their salary to an employer-sponsored plan and defer income taxes until withdrawal.

Flexible benefit plans allow employees to choose among several benefits, such as life insurance, medical care, and vacation days, and among several levels of coverage within a given benefit.

Notes on the data

Surveys of employees in medium and large establishments conducted over the 1979–86 period included establishments that employed at least 50, 100, or 250 workers, depending on the industry (most service industries were excluded). The survey conducted in 1987 covered only State and local governments with 50 or more employ-

ees. The surveys conducted in 1988 and 1989 included medium and large establishments with 100 workers or more in private industries. All surveys conducted over the 1979–89 period excluded establishments in Alaska and Hawaii, as well as part-time employees.

Beginning in 1990, surveys of State and local governments and small private establishments were conducted in even-numbered years, and surveys of medium and large establishments were conducted in odd-numbered years. The small establishment survey includes all private nonfarm establishments with fewer than 100 workers, while the State and local government survey includes all governments, regardless of the number of workers. All three surveys include full- and part-time workers, and workers in all 50 States and the District of Columbia.

FOR ADDITIONAL INFORMATION on the Employee Benefits Survey, contact the Office of Compensation Levels and Trends on the Internet:

http://www.bls.gov/ebs/

Work stoppages

Description of the series

Data on work stoppages measure the number and duration of major strikes or lockouts (involving 1,000 workers or more) occurring during the month (or year), the number of workers involved, and the amount of work time lost because of stoppage. These data are presented in table 36.

Data are largely from a variety of published sources and cover only establishments directly involved in a stoppage. They do not measure the indirect or secondary effect of stoppages on other establishments whose employees are idle owing to material shortages or lack of service.

Definitions

Number of stoppages: The number of strikes and lockouts involving 1,000 workers or more and lasting a full shift or longer.

Workers involved: The number of workers directly involved in the stoppage.

Number of days idle: The aggregate number of workdays lost by workers involved in the stoppages.

Days of idleness as a percent of estimated working time: Aggregate workdays lost as a percent of the aggregate number of standard workdays in the period multiplied by total employment in the period.

Notes on the data

This series is not comparable with the one terminated in 1981 that covered strikes involving six workers or more.

FOR ADDITIONAL INFORMATION on work stoppages data, contact the Office of Compensation and Working Conditions: (202) 691–6282, or the Internet:

http:/www.bls.gov/cba/

Price Data

(Tables 2; 37–47)

Price data are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period—December 2003 = 100 for many Producer Price Indexes (unless otherwise noted), 1982–84 = 100 for many Consumer Price Indexes (unless otherwise noted), and 1990 = 100 for International Price Indexes.

Consumer Price Indexes

Description of the series

The **Consumer Price Index** (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all-urban consumer index (CPI-U), introduced in 1978, is representative of the 1993–95 buying habits of about 87 percent of the noninstitutional population of the United States at that time, compared with 32 percent represented in the CPI-W. In addition to wage earners and clerical workers, the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items are kept essentially unchanged between major revisions so that only price changes will be measured. All taxes directly associated with the purchase and use of items are included in the index.

Data collected from more than 23,000 retail establishments and 5,800 housing units in 87 urban areas across the country are used to develop the "U.S. city average." Separate estimates for 14 major urban centers are presented in table 38. The areas listed are as indicated in footnote 1 to the table. The area indexes measure only the average change in prices for each area since the base period, and do not indicate differences in the level of prices among cities.

Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are meaured for the CPI-U. A rental equivalence method replaced the asset-price approach to homeownership costs for that series. In January 1985, the same change was made in the CPI-W. The central purpose of the change was to separate shelter costs from the investment component of homeownership so that the index would reflect only the cost of shelter services provided by owner-occupied homes. An updated CPI-U and CPI-W were introduced with release of the January 1987 and January 1998 data.

FOR ADDITIONAL INFORMATION, contact the Division of Prices and Price Indexes: (202) 691–7000.

Producer Price Indexes

Description of the series

Producer Price Indexes (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 80,000 quotations per month, selected to represent the movement of prices of all commodities produced in the manufacturing; agriculture, forestry, and fishing; mining; and gas and electricity and public utilities sectors. The stage-of-processing structure of PPI organizes products by class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition. The industry and product structure of PPI organizes data in accordance with the 2002 North American Industry Classification System and product codes developed by the U.S. Census Bureau.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

Since January 1992, price changes for the various commodities have been averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1987. The detailed data are aggregated to obtain indexes for stage-of-processing groupings, commodity groupings, durability-of-product groupings, and a number of special composite groups. All Producer Price Index data are subject to revision 4 months after original publication.

FOR ADDITIONAL INFORMATION, contact the Division of Industrial Prices and Price Indexes: (202) 691–7705.

International Price Indexes

Description of the series

The **International Price Program** produces monthly and quarterly export and import price indexes for nonmilitary goods and services traded between the United States and the rest of the world. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts; it includes corporations, businesses, and individuals, but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The import price index provides a measure of price change for goods purchased from other countries by U.S. residents.

The product universe for both the import and export indexes includes raw materials, agricultural products, semifinished manufactures, and finished manufactures, including both capital and consumer goods. Price data for these items are collected primarily by mail questionnaire. In nearly all cases, the data are collected directly from the exporter or importer, although in a few cases, prices are obtained from other sources.

To the extent possible, the data gathered refer to prices at the U.S. border for exports and at either the foreign border or the U.S. border for imports. For nearly all products, the prices refer to transactions completed during the first week of the month. Survey respondents are asked to indicate all discounts, allowances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

In addition to general indexes of prices for U.S. exports and imports, indexes are also published for detailed product categories of exports and imports. These categories are defined according to the five-digit level of detail for the Bureau of Economic Analysis End-use Classification, the three-digit level for the Standard International Trade Classification (SITC), and the four-digit level of detail for the Harmonized System. Aggregate import indexes by country or region of origin are also available.

BLS publishes indexes for selected categories of internationally traded services, calculated on an international basis and on a balance-of-payments basis.

Notes on the data

The export and import price indexes are weighted indexes of the Laspeyres type. The trade weights currently used to compute both indexes relate to 2000.

Because a price index depends on the same items being priced from period to period, it is necessary to recognize when a product's specifications or terms of transaction have been modified. For this reason, the Bureau's questionnaire requests detailed descriptions of the physical and functional characteristics of the products being priced, as well as information on the number of units bought or sold, discounts, credit terms, packaging, class of buyer or seller, and so forth. When there are changes in either the specifications or terms of transaction of a product, the dollar value of each change is deleted from the total price change to obtain the "pure" change. Once this value is determined, a linking procedure is employed which allows for the continued repricing of the item.

FOR ADDITIONAL INFORMATION, contact the Division of International Prices: (202) 691–7155.

Productivity Data

(Tables 2; 48–51)

Business and major sectors

Description of the series

The productivity measures relate real output to real input. As such, they encompass a family of measures which include single-factor input measures, such as output per hour, output per unit of labor input, or output per unit of capital input, as well as measures of multifactor productivity (output per unit of combined labor and capital inputs). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

Corresponding indexes of hourly compensation, unit labor costs, unit nonlabor payments, and prices are also provided.

Definitions

Output per hour of all persons (labor productivity) is the quantity of goods and services produced per hour of labor input. **Output per unit of capital services** (capital productivity) is the quantity of goods and services produced per unit of capital services input. **Multifactor productivity** is the quantity of goods and services produced per combined inputs. For private business and private nonfarm business, inputs include labor and capital units. For manufacturing, inputs include labor, capital, energy, nonenergy materials, and purchased business services.

Compensation per hour is total compensation divided by hours at work. Total compensation equals the wages and salaries of employees plus employers' contributions for social insurance and private benefit plans, plus an estimate of these payments for the self-employed (except for nonfinancial corporations in which there are no self-employed). **Real compensation per hour** is compensation per hour deflated by the change in the Consumer Price Index for All Urban Consumers.

Unit labor costs are the labor compensation costs expended in the production of a unit of output and are derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from current-dollar value of output and dividing by output.

Unit nonlabor costs contain all the components of unit nonlabor payments except unit profits.

Unit profits include corporate profits with inventory valuation and capital consumption adjustments per unit of output.

Hours of all persons are the total hours at work of payroll workers, self-employed persons, and unpaid family workers. .

Labor inputs are hours of all persons adjusted for the effects of changes in the education and experience of the labor force.

Capital services are the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

Combined units of labor and capital inputs are derived by combining changes in labor and capital input with weights which represent each component's share of total cost. Combined units of labor, capital, energy, materials, and purchased business services are similarly derived by combining changes in each input with weights that represent each input's share of total costs. The indexes for each input and for combined units are based on changing weights which are averages of the shares in the current and preceding year (the Tornquist index-number formula).

Notes on the data

Business sector output is an annually-weighted index constructed by excluding from real gross domestic product (GDP) the following outputs: general government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Nonfarm business also excludes farming. Private business and private nonfarm business further exclude government enterprises. The measures are supplied by the U.S. Department of Commerce's Bureau of Economic Analysis. Annual estimates of manufacturing sectoral output are produced by the Bureau of Labor Statistics. Quarterly manufacturing output indexes from the Federal Reserve Board are adjusted to these annual output measures by the BLS. Compensation data are developed from data of the Bureau of Economic Analysis and the Bureau of Labor Statistics. Hours data are developed from data of the Bureau of Labor Statistics.

The productivity and associated cost measures in tables 48–51 describe the relationship between output in real terms and the labor and capital inputs involved in its production. They show the changes from period to period in the amount of goods and services produced per unit of input.

Although these measures relate output to hours and capital services, they do not measure the contributions of labor, capital, or any other specific factor of production. Rather, they reflect the joint effect of many influences, including changes in technology; shifts in the composition of the labor force; capital investment; level of output; changes in the utilization of capacity, energy, material, and research and development; the organization of production; managerial skill; and characteristics and efforts of the work force.

FOR ADDITIONAL INFORMATION on this productivity series, contact the Division of Productivity Research: (202) 691–5606.

Industry productivity measures

Description of the series

The BLS industry productivity indexes measure the relationship between output and inputs for selected industries and industry groups, and thus reflect trends in industry efficiency over time. Industry measures include labor productivity, multifactor productivity, compensation, and unit labor costs.

The industry measures differ in methodology and data sources from the productivity measures for the major sectors because the industry measures are developed independently of the National Income and Product Accounts framework used for the major sector measures.

Definitions

Output per hour is derived by dividing an index of industry output by an index of labor input. For most industries, **output** indexes are derived from data on the value of industry output adjusted for price change. For the remaining industries, output indexes are derived from data on the physical quantity of production.

The **labor input** series is based on the hours of all workers or, in the case of some transportation industries, on the number of employees. For most industries, the series consists of the hours of all employees. For some trade and services industries, the series also includes the hours of partners, proprietors, and unpaid family workers.

Unit labor costs represent the labor compensation costs per unit of output produced, and are derived by dividing an index of labor compensation by an index of output. **Labor compensation** includes payroll as well as supplemental payments, including both legally required expenditures and payments for voluntary programs.

Multifactor productivity is derived by dividing an index of industry output by an index of combined inputs consumed in producing that output. **Combined inputs** include capital, labor, and intermediate purchases. The measure of **capital input** represents the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories. The measure of **intermediate purchases** is a combination of purchased materials, services, fuels, and electricity.

Notes on the data

The industry measures are compiled from data produced by the Bureau of Labor Statistics and the Census Bureau, with additional data supplied by other government agencies, trade associations, and other sources.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Industry Productivity Studies: (202) 691–5618.

International Comparisons

(Tables 52–54)

Labor force and unemployment

Description of the series

Tables 52 and 53 present comparative measures of the labor force, employment, and unemployment approximating U.S. concepts for the United States, Canada, Australia, Japan, and six European countries. The labor force statistics published by other industrial countries are not, in most cases, comparable to U.S. concepts. Therefore, the Bureau adjusts the figures for selected countries, for all known major definitional differences, to the extent that data to prepare adjustments are available. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country. For further information on adjustments and comparability issues, see Constance Sorrentino, "International unemployment rates: how comparable are they?" *Monthly Labor Review*, June 2000, pp. 3–20 (available on the BLS Web site at **http://www.bls.gov/opub/mlr/2000/06/art1full.pdf**).

Definitions

For the principal U.S. definitions of the labor force, employment, and unemployment, see the Notes section on Employment and

Unemployment Data: Household survey data.

Notes on the data

The foreign country data are adjusted as closely as possible to U.S. concepts, with the exception of lower age limits and the treatment of layoffs. These adjustments include, but are not limited to: including older persons in the labor force by imposing no upper age limit, adding unemployed students to the unemployed, excluding the military and family workers working fewer than 15 hours from the employed, and excluding persons engaged in passive job search from the unemployed.

Data for the United States relate to the population 16 years of age and older. The U.S. concept of the working age population has no upper age limit. The adjusted to U.S. concepts statistics have been adapted, insofar as possible, to the age at which compulsory schooling ends in each country, and the Swedish statistics have been adjusted to include persons older than the Swedish upper age limit of 64 years. The adjusted statistics presented here relate to the population 16 years of age and older in France, Sweden, and the United Kingdom; 15 years of age and older in Australia, Japan, Germany, Italy, and the Netherlands. An exception to this rule is that the Canadian statistics are adjusted to cover the population 16 years of age and older, whereas the age at which compulsory schooling ends remains at 15 years. In the labor force participation rates and employment-population ratios, the denominator is the civilian noninstitutionalized working age population, except that the institutionalized working age population is included in Japan and Germany.

In the United States, the unemployed include persons who are not employed and who were actively seeking work during the reference period, as well as persons on layoff. Persons waiting to start a new job who were actively seeking work during the reference period are counted as unemployed under U.S. concepts; if they were not actively seeking work, they are not counted in the labor force. In some countries, persons on layoff are classified as employed due to their strong job attachment. No adjustment is made for the countries that classify those on layoff as employed. In the United States, as in Australia and Japan, passive job seekers are not in the labor force; job search must be active, such as placing or answering advertisements, contacting employers directly,or registering with an employment agency (simply reading ads is not enough to qualify as active search). Canada and the European countries classify passive jobseekers as unemployed. An adjustment is made to exclude them in Canada, but not in the European countries where the phenomenon is less prevalent. Persons waiting to start a new job are counted among the unemployed for all other countries, whether or not they were actively seeking work.

The figures for one or more recent years for France, Germany, and the Netherlands are calculated using adjustment factors based on labor force surveys for earlier years and are considered preliminary. The recent year measures for these countries are therefore subject to revision whenever more current labor force surveys become available.

There are breaks in series for the United States (1994, 1997, 1998, 1999, 2000, 2003), Australia (2001), and Germany (1999).

For the United States, beginning in 1994, data are not strictly comparable for prior years because of the introduction of a major redesign of the labor force survey questionnaire and collection methodology. The redesign effect has been estimated to increase the overall unemployment rate by 0.1 percentage point. Other breaks noted relate to changes in population controls that had virtually no effect on unemployment rates.

For a description of all the changes in the U.S. labor force survey over time and their impact, see Historical Comparability in the "Household Data" section of the BLS publication *Employment and Earnings* (available on the BLS Web site at **http://www.bls.gov/cps/eetech_methods.pdf**).

For Australia, the 2001 break reflects the introduction in April 2001 of a redesigned labor force survey that allowed for a closer application of International Labor Office guidelines for the definitions of labor force statistics. The Australian Bureau of Statistics revised their data so there is no break in the employment series. However, the reclassification of persons who had not actively looked for work because they were waiting to begin a new job from "not in the labor force" to "unemployed" could only be incorporated for April 2001 forward. This reclassification diverges from the U.S. definition where persons waiting to start a new job but not actively seeking work are not counted in the labor force. The impact of the reclassification was an increase in the unemployment rate by 0.1 percentage point in 2001.

For Germany, the 1999 break reflects the incorporation of an improved method of data calculation and a change in coverage to persons living in private households only.

For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries*, on the BLS Web site at **http://www.bls.gov/fls/flslforc.pdf**

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691-5654 or **flshelp@bls.gov**

Manufacturing productivity and labor costs

Description of the series

Table 54 presents comparative indexes of manufacturing labor productivity (output per hour), output, total hours, compensation per hour, and unit labor costs for the United States, Canada, Japan, and nine European countries. These measures are trend comparisons—that is, series that measure changes over time—rather than level comparisons. There are greater technical problems in comparing the levels of manufacturing output among countries.

BLS constructs the comparative indexes from three basic aggregate measures—output, total labor hours, and total compensation. The hours and compensation measures refer to all employed persons (wage and salary earners plus self-employed persons and unpaid family workers) in the United States, Canada, Japan, France, Germany, Norway, and Sweden, and to all employees (wage and salary earners) in the other countries.

Definitions

Output, in general, refers to value added in manufacturing from the national accounts of each country. However, the output series for Japan prior to 1970 is an index of industrial production, and the national accounts measures for the United Kingdom are essentially identical to their indexes of industrial production.

The 1977–97 output data for the United States are the gross product originating (value added) measures prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce. Comparable manufacturing output data currently are not available prior to 1977.

U.S. gross product originating is a chain-type annual-weighted series. (For more information on the U.S. measure, see Robert E. Yuskavage, "Improved Estimates of Gross Product by Industry, 1959–94," *Survey of Current Business*, August 1996, pp. 133–55.) The Japanese value added series is based upon one set of fixed price weights for the years 1970 through 1997. Output series for the other foreign economies also employ fixed price weights, but the weights are updated periodically (for example, every 5 or 10 years).

To preserve the comparability of the U.S. measures with those for other economies, BLS uses gross product originating in manufacturing for the United States for these comparative measures. The gross product originating series differs from the manufacturing output series that BLS publishes in its news releases on quarterly measures of U.S. productivity and costs (and that underlies the measures that appear in tables 48 and 50 in this section). The quarterly measures are on a "sectoral output" basis, rather than a value-added basis. Sectoral output is gross output less intrasector transactions.

Total labor hours refers to hours worked in all countries. The measures are developed from statistics of manufacturing employment and average hours. The series used for France (from 1970 forward), Norway, and Sweden are official series published with the national accounts. Where official total hours series are not available, the measures are developed by BLS using employment figures published with the national accounts, or other comprehensive employment series, and estimates of annual hours worked. For Germany, BLS uses estimates of average hours worked developed by a research institute connected to the Ministry of Labor for use with the national accounts employment figures. For the other countries, BLS constructs its own estimates of average hours.

An hours series is not available for Denmark after 1993; therefore, the BLS measure of labor input for Denmark ends in 1993.

Total compensation (labor cost) includes all payments in cash or in-kind made directly to employees plus employer expenditures for legally required insurance programs and contractual and private benefit plans. The measures are from the national accounts of each country, except those for Belgium, which are developed by BLS using statistics on employment, average hours, and hourly compensation. For Canada, France, and Sweden, compensation is increased to account for other significant taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for employment-related subsidies. Self-employed workers are included in the all-employed-persons measures by assuming that their hourly compensation is equal to the average for wage and salary employees.

Notes on the data

In general, the measures relate to total manufacturing as defined by the International Standard Industrial Classification. However, the measures for France (for all years) and Italy (beginning in 1970) refer to mining and manufacturing less energy-related products, and the measures for Denmark include mining and exclude manufacturing handicrafts from 1960 to 1966.

The measures for recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation until national accounts and other statistics used for the long-term measures become available.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691–5654.

Occupational Injury and Illness Data

(Tables 55–56)

Survey of Occupational Injuries and Illnesses

Description of the series

The Survey of Occupational Injuries and Illnesses collects data from employers about their workers' job-related nonfatal injuries and illnesses. The information that employers provide is based on records that they maintain under the Occupational Safety and Health Act of 1970. Self-employed individuals, farms with fewer than 11 employees, employers regulated by other Federal safety and health laws, and Federal, State, and local government agencies are excluded from the survey.

The survey is a Federal-State cooperative program with an independent sample selected for each participating State. A stratified random sample with a Neyman allocation is selected to represent all private industries in the State. The survey is stratified by Standard Industrial Classification and size of employment.

Definitions

Under the Occupational Safety and Health Act, employers maintain records of nonfatal work-related injuries and illnesses that involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid.

Occupational injury is any injury such as a cut, fracture, sprain, or amputation that results from a work-related event or a single, instantaneous exposure in the work environment.

Occupational illness is an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or disease which may be caused by inhalation, absorption, ingestion, or direct contact.

Lost workday injuries and illnesses are cases that involve days away from work, or days of restricted work activity, or both.

Lost workdays include the number of workdays (consecutive or not) on which the employee was either away from work or at work in some restricted capacity, or both, because of an occupational injury or illness. BLS measures of the number and incidence rate of lost workdays were discontinued beginning with the 1993 survey. The number of days away from work or days of restricted work activity does not include the day of injury or onset of illness or any days on which the employee would not have worked, such as a Federal holiday, even though able to work.

Incidence rates are computed as the number of injuries and/or illnesses or lost work days per 100 full-time workers.

Notes on the data

The definitions of occupational injuries and illnesses are from *Recordkeeping Guidelines for Occupational Injuries and Illnesses* (U.S. Department of Labor, Bureau of Labor Statistics, September 1986).

Estimates are made for industries and employment size classes for total recordable cases, lost workday cases, days away from work cases, and nonfatal cases without lost workdays. These data also are shown separately for injuries. Illness data are available for seven categories: occupational skin diseases or disorders, dust diseases of the lungs, respiratory conditions due to toxic agents, poisoning (systemic effects of toxic agents), disorders due to physical agents (other than toxic materials), disorders associated with repeated trauma, and all other occupational illnesses.

The survey continues to measure the number of new work-related illness cases which are recognized, diagnosed, and reported during the year. Some conditions, for example, long-term latent illnesses caused by exposure to carcinogens, often are difficult to relate to the workplace and are not adequately recognized and reported. These long-term latent ill-

nesses are believed to be understated in the survey's illness measure. In contrast, the overwhelming majority of the reported new illnesses are those which are easier to directly relate to workplace activity (for example, contact dermatitis and carpal tunnel syndrome).

Most of the estimates are in the form of incidence rates, defined as the number of injuries and illnesses per 100 equivalent full-time workers. For this purpose, 200,000 employee hours represent 100 employee years (2,000 hours per employee). Full detail on the available measures is presented in the annual bulletin, *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics.*

Comparable data for more than 40 States and territories are available from the BLS Office of Safety, Health and Working Conditions. Many of these States publish data on State and local government employees in addition to private industry data.

Mining and railroad data are furnished to BLS by the Mine Safety and Health Administration and the Federal Railroad Administration. Data from these organizations are included in both the national and State data published annually.

With the 1992 survey, BLS began publishing details on serious, nonfatal incidents resulting in days away from work. Included are some major characteristics of the injured and ill workers, such as occupation, age, gender, race, and length of service, as well as the circumstances of their injuries and illnesses (nature of the disabling condition, part of body affected, event and exposure, and the source directly producing the condition). In general, these data are available nationwide for detailed industries and for individual States at more aggregated industry levels.

FOR ADDITIONAL INFORMATION on occupational injuries and illnesses, contact the Office of Occupational Safety, Health and Working Conditions at (202) 691–6180, or access the Internet at:

http://www.bls.gov/iif/

Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events. The program collects and cross checks fatality information from multiple sources, including death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

In addition to private wage and salary workers, the self-employed, family members, and Federal, State, and local government workers are covered by the program. To be included in the fatality census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job.

Definition

A fatal work injury is any intentional or unintentional wound or damage to the body resulting in death from acute exposure to energy, such as heat or electricity, or kinetic energy from a crash, or from the absence of such essentials as heat or oxygen caused by a specific event or incident or series of events within a single workday or shift. Fatalities that occur during a person's commute to or from work are excluded from the census, as well as work-related illnesses, which can be difficult to identify due to long latency periods.

Notes on the data

Twenty-eight data elements are collected, coded, and tabulated in the fatality program, including information about the fatally injured worker, the fatal incident, and the machinery or equipment involved. Summary worker demographic data and event characteristics are included in a national news release that is available about 8 months after the end of the reference year. The Census of Fatal Occupational Injuries was initiated in 1992 as a joint Federal-State effort. Most States issue summary information at the time of the national news release.

FOR ADDITIONAL INFORMATION on the Census of Fatal Occupational Injuries contact the BLS Office of Safety, Health, and Working Conditions at (202) 691–6175, or the Internet at:

http://www.bls.gov/iif/

1. Labor market indicators

Selected indicators	2002	2003	2002			2003				2004	
			II	III	IV	I	II	III	IV	I	II
Employment data											
Employment status of the civilian noninstitutional population (household survey):[1]											
Labor force participation rate	66.6	66.2	66.7	66.6	66.5	66.3	66.4	66.2	66.1	66.0	65.9
Employment-population ratio	62.7	62.3	62.8	62.8	62.5	62.4	62.3	62.1	62.3	62.2	62.2
Unemployment rate	5.8	6.0	5.9	5.8	5.9	5.8	6.1	6.1	5.9	5.6	5.6
Men	5.9	6.3	6.0	5.9	6.1	6.1	6.5	6.4	6.1	5.7	5.7
16 to 24 years	12.8	13.4	12.8	13.1	12.5	12.6	14.0	13.8	13.1	12.5	12.9
25 years and older	4.7	5.0	4.8	4.7	4.9	5.0	5.2	5.1	4.9	4.5	4.5
Women	5.6	5.7	5.7	5.6	5.7	5.5	5.7	5.8	5.6	5.6	5.4
16 to 24 years	11.1	11.4	11.2	10.9	11.4	11.2	11.8	11.5	10.9	11.1	10.9
25 years and older	4.6	4.6	4.8	4.6	4.6	4.5	4.6	4.7	4.6	4.5	4.4
Employment, nonfarm (payroll data), in thousands:[1]											
Total nonfarm	130,341	129,932	130,389	130,287	130,248	130,047	129,878	129,820	130,002	130,367	131,148
Total private	108,828	108,356	108,895	108,736	108,654	108,428	108,309	108,260	108,453	108,827	109,596
Goods-producing	22,557	21,817	22,638	22,466	22,252	22,025	21,848	21,718	21,676	21,719	21,863
Manufacturing	15,259	14,524	15,347	15,197	14,979	14,775	14,570	14,410	14,340	14,326	14,377
Service-providing	107,789	108,115	107,751	107,821	107,995	108,022	108,030	108,102	108,326	108,648	109,285
Average hours:											
Total private	33.9	33.7	33.9	33.9	33.8	33.8	33.7	33.6	33.7	33.8	33.7
Manufacturing	40.5	40.4	40.6	40.4	40.4	40.4	40.2	40.2	40.6	41.0	40.9
Overtime	4.2	4.2	4.3	4.3	4.2	4.2	4.1	4.1	4.4	4.6	4.6
Employment Cost Index[2]											
Percent change in the ECI, compensation:											
All workers (excluding farm, household and Federal workers)	3.4	3.8	.9	.9	.6	1.4	.8	1.1	.5	1.4	.9
Private industry workers	3.2	4.0	1.1	.6	.4	1.7	.8	1.0	.4	1.5	.9
Goods-producing[3]	3.7	4.0	.9	.6	.9	1.8	.9	.7	.5	2.3	.9
Service-providing[3]	3.1	4.0	1.2	.6	.2	1.5	.8	1.1	.5	1.1	1.0
State and local government workers	4.1	3.3	.4	2.2	.9	.7	.4	1.7	.5	.7	.4
Workers by bargaining status (private industry):											
Union	4.2	4.6	1.0	1.2	.9	1.6	1.2	1.0	.7	2.8	1.5
Nonunion	3.2	3.9	1.1	.5	.4	1.6	.8	1.0	.4	1.3	.8

[1] Quarterly data seasonally adjusted.

[2] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter.

[3] Goods-producing industries include mining, construction, and manufacturing. Service-providing industries include all other private sector industries.

NOTE: Beginning in January 2003, household survey data reflect revised population controls. Nonfarm data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data.

2. Annual and quarterly percent changes in compensation, prices, and productivity

Selected measures	2002	2003	2002			2003				2004	
			II	III	IV	I	II	III	IV	I	II
Compensation data[1,2]											
Employment Cost Index—compensation (wages, salaries, benefits):											
Civilian nonfarm	3.4	3.8	0.9	0.9	0.6	1.4	0.8	1.1	0.5	1.4	0.9
Private nonfarm	3.2	4.0	1.1	.6	.4	1.7	.8	1.0	.4	1.5	.9
Employment Cost Index—wages and salaries:											
Civilian nonfarm	2.9	2.9	.8	.7	.4	1.0	.6	.9	.3	.6	.6
Private nonfarm	2.7	3.0	1.0	.4	.3	1.1	.7	.8	.4	.7	.7
Price data[1]											
Consumer Price Index (All Urban Consumers): All Items	2.3	2.3	.5	.6	-.1	1.8	−.3	−.2	−.2	1.2	1.2
Producer Price Index:											
Finished goods	3.2	3.2	.2	.2	-.1	3.7	−.8	.3	.0	1.2	1.2
Finished consumer goods	4.2	4.2	.4	.0	-.3	2.4	1.8	.3	.0	1.5	1.4
Capital equipment	.4	.4	−.3	−.7	.6	.6	−.6	−.1	.0	.6	.5
Intermediate materials, supplies, and components	4.6	4.6	1.1	1.1	.1	6.5	−2.1	−.1	.0	2.5	3.0
Crude materials	25.2	25.2	37.1	1.9	6.5	28.0	−10.6	3.4	14.4	6.0	7.6
Productivity data[3]											
Output per hour of all persons:											
Business sector	4.3	4.5	1.7	4.8	1.2	3.9	7.6	8.5	2.4	3.9	1.5
Nonfarm business sector	4.4	4.4	1.1	4.5	1.6	3.7	6.7	9.0	3.1	3.7	2.5
Nonfinancial corporations[4]	4.4	5.4	4.9	4.1	3.4	3.2	9.1	9.4	5.0	.2	1.4

[1] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter. Compensation and price data are not seasonally adjusted, and the price data are not compounded.

[2] Excludes Federal and private household workers.

[3] Annual rates of change are computed by comparing annual averages. Quarterly percent changes reflect annual rates of change in quarterly indexes. The data are seasonally adjusted.

[4] Output per hour of all employees.

3. Alternative measures of wage and compensation changes

Components	Quarterly change					Four quarters ending—				
	2003			2004		2003			2004	
	II	III	IV	I	II	II	III	IV	I	II
Average hourly compensation:[1]										
All persons, business sector	6.1	5.6	4.0	2.8	3.7	3.6	4.6	5.3	4.6	4.0
All persons, nonfarm business sector	5.7	6.1	4.4	2.0	4.3	3.4	4.6	5.4	4.5	4.2
Employment Cost Index—compensation:										
Civilian nonfarm[2]	.8	1.1	.5	1.4	.9	3.7	3.9	3.8	3.8	3.9
Private nonfarm	.8	1.0	.4	1.5	.9	3.5	4.0	4.0	3.9	4.0
Union	1.2	1.0	.7	2.8	1.5	5.0	4.8	4.6	5.7	6.0
Nonunion	.8	1.0	.4	1.3	.8	3.3	3.8	3.9	3.6	3.5
State and local governments	.4	1.7	.5	.7	.4	4.1	3.6	3.3	3.3	3.4
Employment Cost Index—wages and salaries:										
Civilian nonfarm[2]	.6	.9	.3	.6	.5	2.7	2.9	2.9	2.5	2.5
Private nonfarm	.7	.8	.4	.7	.7	2.6	3.0	3.0	2.6	2.6
Union	.7	.6	.6	.6	1.0	3.0	2.6	2.4	2.5	2.9
Nonunion	.7	.9	.2	.7	.6	2.5	3.1	3.1	2.6	2.5
State and local governments	.3	1.0	.4	.4	.2	3.1	2.3	2.1	2.1	1.9

[1] Seasonally adjusted. "Quarterly average" is percent change from a quarter ago, at an annual rate.

[2] Excludes Federal and household workers.

4. Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
TOTAL															
Civilian noninstitutional population[1]	217,570	221,168	221,252	221,507	221,779	222,039	222,279	222,509	222,161	222,357	222,550	222,757	222,967	223,196	223,422
Civilian labor force	144,863	146,510	146,652	146,622	146,610	146,892	147,187	146,878	146,863	146,471	146,650	146,741	146,974	147,279	147,856
Participation rate	66.6	66.2	66.3	66.2	66.1	66.2	66.2	66.0	66.1	65.9	65.9	65.9	65.9	66.0	66.2
Employed	136,485	137,736	137,604	137,693	137,644	138,095	138,533	138,479	138,566	138,301	138,298	138,576	138,772	139,031	139,660
Employment-population ratio[2]	62.7	62.3	62.2	62.2	62.1	62.2	62.3	62.2	62.4	62.2	62.1	62.2	62.2	62.3	62.5
Unemployed	8,378	8,774	9,048	8,929	8,966	8,797	8,653	8,398	8,297	8,170	8,352	8,164	8,203	8,248	8,196
Unemployment rate	5.8	6.0	6.2	6.1	6.1	6.0	5.9	5.7	5.6	5.6	5.7	5.6	5.6	5.6	5.5
Not in the labor force	72,707	74,658	74,600	74,884	75,168	75,147	75,093	75,631	75,298	75,886	75,900	76,016	75,993	75,916	75,565
Men, 20 years and over															
Civilian noninstitutional population[1]	96,439	98,272	98,304	98,434	98,568	98,696	98,814	98,927	98,866	98,966	99,065	99,170	99,279	99,396	99,512
Civilian labor force	73,630	74,623	74,660	74,682	74,905	74,942	75,188	75,044	75,171	74,797	75,018	74,871	75,048	75,372	75,577
Participation rate	76.3	75.9	75.9	75.9	76.0	75.9	76.1	75.9	76.0	75.6	75.7	75.5	75.6	75.8	75.9
Employed	69,734	70,415	70,269	70,324	70,596	70,726	70,964	71,099	71,329	70,969	71,128	71,118	71,162	71,570	71,847
Employment-population ratio[2]	72.3	71.7	71.5	71.4	71.6	71.7	71.8	71.9	72.1	71.7	71.8	71.7	71.7	72.0	72.2
Unemployed	3,896	4,209	4,391	4,358	4,309	4,216	4,224	3,945	3,842	3,828	3,890	3,753	3,886	3,802	3,730
Unemployment rate	5.3	5.6	5.9	5.8	5.8	5.6	5.6	5.3	5.1	5.1	5.2	5.0	5.2	5.0	4.9
Not in the labor force	22,809	23,649	23,644	23,751	23,663	23,754	23,620	23,882	23,694	24,168	24,047	24,299	24,231	24,023	23,935
Women, 20 years and over															
Civilian noninstitutional population[1]	105,136	106,800	106,839	106,957	107,080	107,197	107,303	107,404	107,131	107,216	107,299	107,389	107,483	107,586	107,687
Civilian labor force	63,648	64,716	64,835	64,836	64,608	64,899	64,917	64,846	64,515	64,629	64,687	64,785	64,813	64,893	65,122
Participation rate	60.5	60.6	60.7	60.6	60.3	60.5	60.5	60.4	60.2	60.3	60.3	60.3	60.3	60.3	60.5
Employed	60,420	61,402	61,479	61,467	61,191	61,524	61,597	61,521	61,260	61,456	61,373	61,571	61,721	61,629	61,918
Employment-population ratio[2]	57.5	57.5	57.5	57.5	57.1	57.4	57.4	57.3	57.2	57.3	57.2	57.3	57.4	57.3	57.5
Unemployed	3,228	3,314	3,356	3,369	3,417	3,375	3,320	3,326	3,255	3,172	3,314	3,215	3,092	3,264	3,204
Unemployment rate	5.1	5.1	5.2	5.2	5.3	5.2	5.1	5.1	5.0	4.9	5.1	5.0	4.8	5.0	4.9
Not in the labor force	41,488	42,083	42,004	42,121	42,472	42,299	42,387	42,558	42,617	42,587	42,613	42,604	42,670	42,693	42,565
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	15,994	16,096	16,109	16,116	16,131	16,145	16,162	16,178	16,164	16,175	16,186	16,198	16,205	16,214	16,222
Civilian labor force	7,585	7,170	7,157	7,104	7,097	7,051	7,082	6,987	7,177	7,045	6,945	7,085	7,113	7,014	7,157
Participation rate	47.4	44.5	44.4	44.1	44.0	43.7	43.8	43.2	44.4	43.6	42.9	43.7	43.9	43.3	44.1
Employed	6,332	5,919	5,856	5,902	5,857	5,846	5,972	5,859	5,977	5,875	5,797	5,888	5,888	5,832	5,896
Employment-population ratio[2]	39.6	36.8	36.4	36.6	36.3	36.2	37.0	36.2	37.0	36.3	35.8	36.3	36.3	36.0	36.3
Unemployed	1,253	1,251	1,301	1,202	1,240	1,205	1,109	1,128	1,200	1,170	1,148	1,197	1,225	1,181	1,262
Unemployment rate	16.5	17.5	18.2	16.9	17.5	17.1	15.7	16.1	16.7	16.6	16.5	16.9	17.2	16.8	17.6
Not in the labor force	8,409	8,926	8,952	9,012	9,034	9,094	9,080	9,191	8,987	9,130	9,240	9,113	9,092	9,200	9,065
White[3]															
Civilian noninstitutional population[1]	179,783	181,292	181,341	181,512	181,696	181,871	182,032	182,185	181,879	182,001	182,001	182,252	182,384	182,531	182,676
Civilian labor force	120,150	120,546	120,645	120,658	120,411	120,736	121,041	120,751	120,723	120,540	120,542	120,675	120,984	121,180	121,428
Participation rate	66.8	66.5	66.5	66.5	66.3	66.4	66.5	66.3	66.4	66.2	66.2	66.2	66.3	66.4	66.5
Employed	114,013	114,235	114,086	114,156	114,015	114,535	114,783	114,678	114,765	114,602	114,433	114,712	114,976	115,152	115,623
Employment-population ratio[2]	63.4	63.0	62.9	62.9	62.8	63.0	63.1	62.9	63.1	63.0	62.8	62.9	63.0	63.1	63.3
Unemployed	6,137	6,311	6,559	6,502	6,397	6,200	6,258	6,073	5,958	5,938	6,109	5,963	6,008	6,028	5,805
Unemployment rate	5.1	5.2	5.4	5.4	5.3	5.1	5.2	5.0	4.9	4.9	5.1	4.9	5.0	5.0	4.8
Not in the labor force	59,633	60,746	60,696	60,854	61,285	61,135	60,991	61,434	61,156	61,460	61,579	61,577	61,400	61,351	61,248
Black or African American[3]															
Civilian noninstitutional population[1]	25,578	25,686	25,702	25,742	25,784	25,825	25,860	25,894	25,867	25,900	25,932	25,967	26,002	26,040	26,078
Civilian labor force	16,565	16,526	16,563	16,585	166,677	16,589	16,524	16,365	16,602	16,404	16,595	16,485	16,442	16,506	16,755
Participation rate	64.8	64.3	64.4	64.4	64.7	64.2	63.9	63.2	64.2	63.3	64.0	63.5	63.2	63.4	64.3
Employed	14,872	14,739	14,727	14,771	14,826	14,696	14,812	14,679	14,886	14,804	14,909	14,878	14,818	14,833	14,926
Employment-population ratio[2]	58.1	57.4	57.3	57.4	57.5	56.9	57.3	56.7	57.5	57.2	57.2	57.3	57.0	57.0	57.2
Unemployed	1,693	1,787	1,836	1,813	1,851	1,893	1,712	1,686	1,736	1,600	1,686	1,607	1,624	1,673	1,829
Unemployment rate	10.2	10.8	11.1	10.9	11.1	11.4	10.4	10.3	10.5	9.8	10.2	9.7	9.9	10.1	10.9
Not in the labor force	9,013	9,161	9,139	9,127	9,107	9,236	9,336	9,529	9,265	9,495	9,337	9,482	9,560	9,534	9,323

See footnotes at end of table.

4. Continued—Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		2003							2004					
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Hispanic or Latino ethnicity															
Civilian noninstitutional population[1]	25,963	27,551	27,597	27,701	27,808	27,913	28,016	28,116	27,619	27,705	27,791	27,879	27,968	28,059	28,150
Civilian labor force	17,943	18,813	18,770	18,843	18,877	18,940	19,125	19,035	18,811	18,693	19,010	19,064	19,313	19,304	19,450
Participation rate	69.1	68.3	68.0	68.0	67.9	67.9	68.3	67.7	68.1	67.5	68.4	68.4	69.1	68.8	69.1
Employed	16,590	17,372	17,247	173 83	17,456	17,556	17,709	17,784	17,441	17,303	17,596	17,693	17,958	18,019	18,118
Employment-population ratio[2]	63.9	63.1	62.5	62.8	62.8	62.9	63.2	63.3	63.2	62.5	63.3	63.5	64.2	64.2	64.4
Unemployed	1,353	1,441	1,523	1,460	1,421	1,383	1,416	1,250	1,370	1,389	1,414	1,371	1,355	1,285	1,332
Unemployment rate	7.5	7.7	8.1	7.8	7.5	7.3	7.4	6.6	7.3	7.4	7.4	7.2	7.0	6.7	6.8
Not in the labor force	8,020	8,738	8,828	8,858	8,931	8,974	8,891	9,082	8,807	9,012	8,781	8,815	8,654	8,755	8,700

[1] The population figures are not seasonally adjusted.

[2] Civilian employment as a percent of the civilian noninstitutional population.

[3] Beginning in 2003, persons who selected this race group only; persons who selected more than one race group are not included. Prior to 2003, persons who reported more than one race were included in the group they identified as the main race.

NOTE: Estimates for the above race groups (white and black or African American) do not sum to totals because data are not presented for all races. In addition, persons whose ethnicity is identified as Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race. Beginning in January 2003, data reflect revised population controls used in the household survey.

5. Selected employment indicators, monthly data seasonally adjusted

[In thousands]

Selected categories	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Characteristic															
Employed, 16 years and over	136,845	137,736	137,604	137,693	137,644	138,095	138,533	138,479	138,566	138,301	138,298	138,576	138,772	139,031	139,66
Men	72,903	73,332	73,149	73,263	73,488	73,643	73,915	74,085	74,343	73,901	74,006	74,053	74,035	74,476	74,822
Women	63,582	64,404	64,455	64,431	64,155	64,452	64,618	64,394	64,223	64,400	64,292	64,523	64,737	64,555	64,836
Married men, spouse present	44,116	44,653	44,747	44,659	44,566	44,684	45,152	45,431	45,490	45,128	45,043	44,735	44,723	44,938	44,935
Married women, spouse present	34,155	34,695	34,648	34,684	34,612	34,993	35,076	35,034	34,585	34,502	34,256	34,339	34,522	34,461	34,599
Persons at work part time[1]															
All industries:															
Part time for economic reasons	4,213	4,701	4,661	4,498	4,896	4,800	4,880	4,788	4,714	4,437	4,733	4,574	4,666	4,513	4,490
Slack work or business conditions	2,788	3,118	3,113	3,063	3,185	3,030	3,226	3,205	2,996	2,865	3,011	2,819	2,853	2,803	2,660
Could only find part-time work	1,124	1,279	1,296	1,201	1,334	1,356	1,350	1,295	1,380	1,347	1,427	1,439	1,467	1,404	1,500
Part time for noneconomic reasons	18,843	19,014	19,089	19,482	19,021	18,935	19,110	18,561	18,905	18,900	19,006	19,000	19,621	19,531	19,741
Nonagricultural industries:															
Part time for economic reasons	4,119	4,596	4,568	4,404	4,794	4,690	4,782	4,727	4,613	4,328	4,622	4,471	4,605	4,442	4,400
Slack work or business conditions	2,726	3,052	3,071	2,989	3,127	2,964	3,153	3,144	2,911	2,778	2,927	2,756	2,812	2,762	2,609
Could only find part-time work	1,114	1,264	1,273	1,191	1,335	1,349	1,353	1,279	1,399	1,340	1,414	1,431	1,476	1,387	1,490
Part time for noneconomic reasons	18,487	18,658	18,651	19,016	18,633	18,628	18,752	18,367	18,636	18,691	18,693	18,664	19,220	19,072	19,290

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

6. Selected unemployment indicators, monthly data seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Characteristic															
Total, 16 years and older	5.8	6.0	6.2	6.1	6.1	6.0	5.9	5.7	5.6	5.6	5.7	5.6	5.6	5.6	5.5
Both sexes, 16 to 19 years	16.5	17.5	18.2	16.9	17.5	17.1	15.7	16.1	16.7	16.6	16.5	16.9	17.2	16.8	17.6
Men, 20 years and older	5.3	5.6	5.9	5.8	5.8	5.6	5.6	5.3	5.3	5.1	5.2	5.0	5.2	5.0	4.9
Women, 20 years and older	5.1	5.1	5.2	5.2	5.3	5.2	5.1	5.1	5.0	4.9	5.1	5.0	4.8	5.0	4.9
White, total[1]	5.1	5.2	5.4	5.4	5.3	5.1	5.2	5.0	4.9	4.9	5.1	4.9	5.0	5.0	4.8
Both sexes, 16 to 19 years	14.5	15.2	15.7	15.1	15.1	14.3	14.3	14.8	14.1	15.2	14.8	15.7	15.7	14.8	14.9
Men, 16 to 19 years	15.9	17.1	17.9	16.5	17.6	15.9	16.8	16.3	14.0	15.5	16.2	17.9	18.6	16.4	15.5
Women, 16 to 19 years	13.1	13.3	13.3	13.7	12.6	12.6	11.5	13.1	14.2	14.9	13.3	13.3	12.7	13.2	14.3
Men, 20 years and older	4.7	5.0	5.3	5.3	5.0	4.9	5.0	4.7	4.5	4.5	4.7	4.5	4.7	4.5	4.3
Women, 20 years and older	4.4	4.4	4.4	4.4	4.5	4.4	4.4	4.3	4.4	4.2	4.4	4.2	4.1	4.4	4.2
Black or African American, total[1]	10.2	10.8	11.1	10.9	11.1	11.4	10.4	10.3	10.5	9.8	10.2	9.7	9.9	10.1	10.9
Both sexes, 16 to 19 years	29.8	33.0	35.1	29.8	32.7	37.3	28.9	27.3	32.5	25.1	29.4	28.3	32.5	32.6	37.0
Men, 16 to 19 years	31.3	36.0	37.1	27.8	34.2	40.9	32.5	28.4	42.1	29.6	36.6	30.9	30.3	33.9	37.8
Women, 16 to 19 years	28.3	30.3	33.4	31.5	31.4	33.2	25.7	26.5	25.8	21.9	22.8	26.1	34.1	31.4	36.3
Men, 20 years and older	9.5	10.3	10.3	10.5	11.0	10.5	10.1	9.3	9.6	9.4	9.2	9.3	9.3	9.3	10.3
Women, 20 years and older	8.8	9.2	9.6	9.7	9.2	9.8	9.1	9.7	9.1	8.8	9.3	8.7	8.4	8.9	9.1
Hispanic or Latino ethnicity	7.5	7.7	8.1	7.8	7.5	7.3	7.4	6.6	7.3	7.4	7.4	7.2	7.0	6.7	6.8
Married men, spouse present	3.6	3.8	3.9	3.9	3.8	3.8	3.7	3.3	3.3	3.4	3.2	3.1	3.1	3.2	3.2
Married women, spouse present	3.7	3.7	3.9	3.9	3.9	3.8	3.8	3.9	3.7	3.6	3.7	3.7	3.3	3.7	3.5
Full-time workers	5.9	6.1	6.3	6.2	6.2	6.1	6.1	5.8	5.7	5.6	5.8	5.6	5.7	5.6	5.6
Part-time workers	5.2	5.5	5.5	5.3	5.7	5.5	5.1	5.3	5.4	5.2	5.4	5.3	5.2	5.5	5.2
Educational attainment[2]															
Less than a high school diploma	8.4	8.8	8.8	9.3	8.7	8.8	8.5	8.1	8.8	8.5	8.8	8.7	8.8	8.8	8.3
High school graduates, no college[3]	5.3	5.5	5.5	5.4	5.4	5.5	5.4	5.5	4.9	5.0	5.3	5.2	5.0	5.1	5.1
Some college or associate degree	4.5	4.8	5.0	4.7	4.8	4.8	4.8	4.5	4.5	4.4	4.7	4.1	4.0	4.2	4.2
Bachelor's degree and higher[4]	2.9	3.1	3.1	3.1	3.2	3.1	3.1	3.0	2.9	2.9	2.9	2.9	2.9	2.7	2.7

[1] Beginning in 2003, persons who selected this race group only; persons who selected more than one race group are not included. Prior to 2003, persons who reported more than one race were included in the group they identified as the main race.

[2] Data refer to persons 25 years and older.

[3] Includes high school diploma or equivalent.

[4] Includes persons with bachelor's, master's, professional, and doctoral degrees.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Less than 5 weeks	2,893	2,785	2,739	2,735	2,749	2,733	2,622	2,627	2,612	2,468	2,589	2,792	2,707	2,688	2,805
5 to 14 weeks	2,580	2,612	2,698	2,630	2,736	2,585	2,556	2,450	2,394	2,412	2,414	2,369	2,376	2,405	2,476
15 weeks and over	2,904	3,378	3,559	3,561	3,511	3,478	3,484	3,403	3,365	3,274	3,320	2,969	3,077	3,065	2,878
15 to 26 weeks	1,369	1,442	1,598	1,561	1,438	1,460	1,448	1,513	1,467	1,403	1,332	1,170	1,288	1,306	1,211
27 weeks and over	1,535	1,936	1,961	2,001	2,073	2,018	2,036	1,890	1,898	1,871	1,988	1,800	1,789	1,759	1,667
Mean duration, in weeks	16.6	19.2	19.3	19.2	19.6	19.4	20.0	19.6	19.8	20.3	20.1	19.7	20.0	19.9	18.6
Median duration, in weeks	9.1	10.1	10.1	10.0	10.1	10.3	10.4	10.4	10.7	10.3	10.3	9.5	10.0	10.8	8.9

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

8. Unemployed persons by reason for unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Reason for unemployment	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Job losers[1]	4,607	4,838	4,947	4,939	4,947	4,877	4,719	4,618	4,382	4,323	4,607	4,399	4,211	4,099	4,181
On temporary layoff	1,124	1,121	1,173	1,092	1,110	1,097	1,055	1,060	1,028	1,064	1,040	994	926	1,011	1,065
Not on temporary layoff	3,483	3,717	3,774	3,847	3,837	3,780	3,664	3,558	3,353	3,258	3,567	3,405	3,286	3,088	3,116
Job leavers	866	818	798	790	836	789	931	783	804	827	836	822	846	902	895
Reentrants	2,368	2,477	2,522	2,530	2,436	2,518	2,440	2,366	2,509	2,424	2,424	2,314	2,438	2,435	2,330
New entrants	536	641	661	650	684	653	619	694	681	676	627	645	713	636	680
Percent of unemployed															
Job losers[1]	55.0	55.1	55.4	55.4	55.6	55.2	54.2	54.6	52.3	52.4	54.2	53.8	51.3	50.8	51.7
On temporary layoff	13.4	12.8	13.1	12.3	12.5	12.4	12.1	12.5	12.3	12.9	12.2	12.1	11.3	12.5	13.2
Not on temporary layoff	41.6	42.4	42.3	43.2	43.1	42.8	42.1	42.0	40.0	39.8	42.0	41.6	40.0	38.3	38.5
Job leavers	10.3	9.3	8.9	8.9	9.4	8.9	10.7	9.3	9.6	10.0	9.8	10.1	10.3	11.2	11.1
Reentrants	28.3	28.2	28.2	28.4	27.4	28.5	28.0	28.0	30.0	29.4	28.5	28.3	29.7	30.2	28.8
New entrants	6.4	7.3	7.4	7.3	7.7	7.4	7.1	8.2	8.1	8.2	7.4	7.9	8.7	7.9	8.4
Percent of civilian labor force															
Job losers[1]	3.2	3.3	3.4	3.4	3.4	3.3	3.2	3.1	3.0	3.0	3.1	3.0	2.9	2.8	2.8
Job leavers	.6	.6	.5	.5	.6	.5	.6	.5	.5	.6	.6	.6	.6	.6	.6
Reentrants	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.6	1.7	1.7	1.6
New entrants	.4	.4	.5	.4	.5	.4	.4	.5	.5	.5	.4	.4	.5	.4	.5

[1] Includes persons who completed temporary jobs.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

9. Unemployment rates by sex and age, monthly data seasonally adjusted

[Civilian workers]

Sex and age	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total, 16 years and older	5.8	6.0	6.2	6.1	6.1	6.0	5.9	5.7	5.6	5.6	5.7	5.6	5.6	5.6	5.5
16 to 24 years	12.0	12.4	12.9	12.4	12.8	12.3	12.1	11.7	12.0	11.8	11.8	11.6	12.1	12.0	12.0
16 to 19 years	16.5	17.5	18.2	16.9	17.5	17.1	15.7	16.1	16.7	16.6	16.5	16.9	17.2	16.8	17.6
16 to 17 years	18.8	19.1	20.3	18.8	19.3	20.2	17.5	18.3	18.2	17.6	19.4	20.2	21.6	20.6	20.2
18 to 19 years	15.1	16.4	16.8	15.7	16.2	15.2	14.7	14.7	15.7	15.7	14.5	14.7	14.7	14.3	16.1
20 to 24 years	9.7	10.0	10.4	10.2	10.6	10.1	10.4	9.6	9.8	9.5	9.6	9.2	9.7	9.8	9.3
25 years and older	4.6	4.8	5.0	5.0	4.9	4.9	4.8	4.7	4.5	4.5	4.6	4.5	4.4	4.5	4.4
25 to 54 years	4.8	5.0	5.1	5.1	5.1	5.1	5.0	4.9	4.7	4.7	4.9	4.6	4.5	4.5	4.6
55 years and older	3.8	4.1	4.2	4.1	4.0	3.8	3.9	3.9	3.7	3.8	3.8	3.8	3.9	3.9	3.7
Men, 16 years and older	5.9	6.3	6.6	6.4	6.4	6.2	6.2	5.8	5.7	5.7	5.8	5.7	5.8	5.6	5.5
16 to 24 years	12.8	13.4	14.4	12.9	14.1	13.2	13.4	12.6	12.7	12.2	12.6	12.8	13.0	12.8	12.2
16 to 19 years	18.1	19.3	20.4	17.6	19.6	18.7	18.3	17.4	17.5	17.2	18.3	19.1	19.1	18.1	17.7
16 to 17 years	21.1	20.7	22.3	20.6	22.1	20.4	18.3	18.4	19.3	19.4	22.3	23.4	23.3	22.8	21.2
18 to 19 years	16.4	18.4	19.0	15.6	18.2	17.9	18.1	16.9	16.2	15.7	15.8	16.5	16.6	15.8	15.7
20 to 24 years	10.2	10.6	11.6	10.7	11.7	10.8	11.2	10.4	10.5	10.0	10.1	10.0	10.3	10.4	9.7
25 years and older	4.7	5.0	5.2	5.2	5.0	5.0	5.0	4.7	4.5	4.5	4.6	4.4	4.6	4.4	4.4
25 to 54 years	4.8	5.2	5.3	5.4	5.2	5.2	5.2	4.9	4.7	4.7	4.8	4.5	4.7	4.4	4.5
55 years and older	4.1	4.4	4.6	4.4	4.2	4.0	4.1	4.0	3.6	3.7	3.8	3.9	4.1	4.3	3.8
Women, 16 years and older	5.6	5.7	5.7	5.8	5.8	5.7	5.5	5.6	5.6	5.5	5.6	5.4	5.3	5.6	5.6
16 to 24 years	11.1	11.4	11.3	11.8	11.4	11.3	10.7	10.7	11.3	11.2	10.8	10.3	11.1	11.2	11.7
16 to 19 years	14.9	15.6	15.9	16.2	15.2	15.4	13.0	14.7	15.9	16.0	14.7	14.5	15.3	15.6	17.5
16 to 17 years	16.6	17.5	18.3	17.0	16.5	20.1	16.6	18.2	17.1	15.9	16.9	17.3	20.1	18.7	19.4
18 t0 19 years	13.8	14.2	14.5	15.8	14.1	12.5	11.1	12.2	15.2	15.6	13.0	12.6	12.7	12.6	16.5
20 to 24 years	9.1	9.3	9.0	9.7	9.5	9.3	9.6	8.8	8.9	8.9	8.9	8.3	9.0	9.0	8.8
25 years and older	4.6	4.6	4.7	4.7	4.7	4.7	4.6	4.6	4.6	4.4	4.6	4.6	4.2	4.5	4.5
25 to 54 years	4.8	4.8	4.9	4.8	4.9	4.9	4.8	5.0	4.8	4.5	4.9	4.7	4.4	4.7	4.7
55 years and older[1]	3.6	3.7	4.2	4.5	3.8	3.4	3.5	3.5	4.1	3.9	3.5	3.3	3.3	3.8	3.8

[1] Data are not seasonally adjusted.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

10. Unemployment rates by State, seasonally adjusted

State	June 2003	May 2004[P]	June 2004[P]	State	June 2003	May 2004[P]	June 2004[P]
Alabama	5.9	5.9	5.3	Missouri	5.8	5.1	5.2
Alaska	8.0	7.3	7.3	Montana	4.8	4.7	4.8
Arizona	5.8	5.1	4.7	Nebraska	4.1	3.7	3.3
Arkansas	6.2	5.8	5.7	Nevada	5.5	4.1	4.2
California	6.8	6.3	6.3	New Hampshire	4.2	4.0	3.9
Colorado	6.1	4.9	4.9	New Jersey	5.9	4.9	4.7
Connecticut	5.5	4.6	4.6	New Mexico	6.7	5.4	5.4
Delaware	4.3	3.8	3.8	New York	6.3	5.8	6.2
District of Columbia	7.1	7.5	7.1	North Carolina	6.6	5.3	5.5
Florida	5.3	4.6	4.8	North Dakota	3.9	3.2	3.1
Georgia	4.8	3.9	4.0	Ohio	6.2	5.6	5.8
Hawaii	4.4	3.0	3.1	Oklahoma	6.0	4.4	4.9
Idaho	5.5	4.5	5.0	Oregon	8.7	6.8	6.9
Illinois	6.6	6.4	5.9	Pennsylvania	5.6	5.1	5.6
Indiana	5.0	5.2	4.8	Rhode Island	5.4	5.6	5.8
Iowa	4.5	4.3	4.3	South Carolina	7.0	6.3	6.6
Kansas	5.6	4.7	4.7	South Dakota	3.6	3.4	3.4
Kentucky	6.3	5.4	5.5	Tennessee	5.9	4.8	4.5
Louisiana	6.9	6.1	6.0	Texas	6.8	5.9	5.7
Maine	5.0	4.1	4.1	Utah	5.6	4.6	4.6
Maryland	4.5	3.9	3.9	Vermont	4.6	3.5	3.4
Massachusetts	5.8	5.2	5.3	Virginia	4.1	3.5	3.5
Michigan	7.3	6.6	6.5	Washington	7.7	6.1	6.1
Minnesota	5.0	4.3	4.4	West Virginia	6.3	5.2	5.3
Mississippi	6.8	5.6	5.4	Wisconsin	5.6	5.1	5.0
				Wyoming	5.6	5.1	5.0

[P] = preliminary

11. Employment of workers on nonfarm payrolls by State, seasonally adjusted

[In thousands]

State	June 2003	May 2004[P]	June 2004[P]	State	June 2003	May 2004[P]	June 2004[P]
Alabama	2,148,182	2,159,125	2,156,989	Missouri	3,026,724	3,016,518	3,022,776
Alaska	331,217	344,537	344,088	Montana	475,543	477,521	481,307
Arizona	2,689,859	2,753,009	2,750,987	Nebraska	975,639	988.182	986,448
Arkansas	1,260,837	1,319,947	1,315,193	Nevada	1,140,336	1,178,291	1,183,769
California	17,462,717	17,618,177	17,658,587	New Hampshire	718,603	726,888	728,990
Colorado	2,479,533	2,516,192	2,518,767	New Jersey	4,369,923	4,403,622	4,401,993
Connecticut	1,803,091	1,797,651	1,792,757	New Mexico	898,320	905,492	906,370
Delaware	416,810	425,210	427,054	New York	9,308,878	9,267,182	9,308,268
District of Columbia	303,737	299,786	298,632	North Carolina	4,227,596	4,196,496	4,197,317
Florida	8,154,289	8,340,806	8,681,480	North Dakota	346,173	349,577	349,799
Georgia	4,414,477	4,406,985	4,413,170	Ohio	5,920,606	5,843,839	5,850,479
Hawaii	617,057	629,876	629,404	Oklahoma	1,701,850	1,694,391	1,709,864
Idaho	693,004	701,070	705,911	Oregon	1,870,318	1,883,098	1,849,243
Illinois	6,325,486	6,392,724	6,342,412	Pennsylvania	6,164,828	6,253,802	6,238,816
Indiana	3,189,433	3,167,432	3,177,973	Rhode Island	575,187	568,863	569,184
Iowa	1,611,749	1,631,711	1,623,064	South Carolina	2,004,585	2,051,057	2,064,926
Kansas	1,436,644	1,463,836	1,464,740	South Dakota	424,677	424,204	424,597
Kentucky	1,957,697	1,687,991	1,986,376	Tennessee	2,905,372	2,930,548	2,921,022
Louisiana	2,038,348	2,024,336	2,031,818	Texas	10,905,755	10,956,181	10,933,523
Maine	691,285	700,823	699,900	Utah	1,181,839	1,206,350	1,205,963
Maryland	2,903,636	2,954,376	2,945,654	Vermont	350,942	352,306	353,437
Massachusetts	3,415,472	3,408,539	3,409,167	Virginia	3,770,386	3,846,260	3,847,802
Michigan	5,048,282	5,065,925	5,038,211	Washington	3,131,552	3,204,437	3,216,283
Minnesota	2,922,031	2,951,369	2,952,773	West Virginia	789,529	795,509	798,950
Mississippi	1,318,880	1,317,118	1,316,683	Wisconsin	3,081,131	3,115,602	3,116,997
				Wyoming	278,315	278,186	278,979

[P] = preliminary.

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the data base.

12. Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[P]	July[P]
TOTAL NONFARM	130,341	129,931	129,814	129,789	129,856	129,944	130,027	130,035	130,194	130,277	130,630	130,954	131,162	131,240	131,272
TOTAL PRIVATE	108,828	108,356	108,253	108,209	108,317	108,384	108,483	108,491	108,667	108,738	109,077	109,382	109,618	109,711	109,743
GOODS-PRODUCING	22,557	21,817	21,744	21,712	21,697	21,674	21,686	21,668	21,696	21,684	21,778	21,822	21,894	21,896	21,914
Natural resources and mining	583	571	571	569	568	569	571	570	570	572	581	585	589	589	593
Logging	70.4	68.5	68.2	67.5	67.4	67.9	67.6	65.9	65.1	64.2	65.9	66.7	65.6	64.4	64.1
Mining	512.2	502.3	502.7	501.8	500.8	501.5	503.4	504.3	505.1	508.1	514.9	518.5	523.2	524.1	528.4
Oil and gas extraction	121.9	122.9	123.5	123.2	123.6	124.1	123.9	124.6	126.9	128.9	130.0	131.0	132.3	131.8	131.7
Mining, except oil and gas[1]	210.6	202.7	204.3	203.6	201.6	202.1	202.4	202.0	200.0	200.6	202.8	205.2	207.8	209.0	211.7
Coal mining	74.4	70.4	71.6	70.7	69.2	69.6	69.5	69.8	69.6	70.2	70.6	71.8	72.9	73.9	75.1
Support activities for mining	179.8	176.8	174.9	175.0	175.6	175.3	177.1	177.7	178.2	178.6	182.1	182.3	183.1	183.3	185.0
Construction	6,716	6,722	6,721	6,739	6,754	6,754	6,771	6,774	6,812	6,791	6,853	6,872	6,909	6,912	6,916
Construction of buildings	1,574.8	1,575.9	1,566.4	1,570.0	1,577.7	1,579.4	1,583.9	1,585.1	1,593.3	1,590.9	1,607.6	1,609.8	1,622.9	1,625.1	1,627.9
Heavy and civil engineering	930.6	910.7	910.6	913.9	915.2	910.8	918.8	920.7	928.0	924.0	926.8	924.7	924.3	921.9	922.4
Specialty trade contractors	4,210.4	4,235.5	4,244.1	4,255.5	4,260.9	4,263.7	4,268.6	4,268.4	4,290.2	4,276.5	4,318.9	4,337.3	4,362.2	4,365.0	4,365.2
Manufacturing	15,259	14,525	14,452	14,404	14,375	14,351	14,344	14,324	14,314	14,321	14,344	14,365	14,396	14,395	14,405
Production workers	10,766	10,200	10,136	10,104	10,077	10,058	10,048	10,044	10,035	10,038	10,058	10,085	10,123	10,124	10,142
Durable goods	9,483	8,970	8,908	8,886	8,867	8,854	8,874	8,868	8,869	8,882	8,889	8,924	8,946	8,953	8,957
Production workers	6,529	6,157	6,104	6,099	6,077	6,066	6,089	6,079	6,081	6,088	6,101	6,126	6,152	6,159	6,166
Wood products	554.9	536.1	532.4	528.9	531.8	533.4	536.3	536.6	536.3	538.4	539.7	540	543	543.8	544.2
Nonmetallic mineral products	516.0	492.6	760.8	490.2	488	486.6	489.7	487.5	492.7	490.5	493.2	497.8	501.4	502.3	503.3
Primary metals	509.4	476.7	472.1	470.6	466.3	463.4	464.1	464.6	432.2	462.2	462.0	462.5	464.0	465.7	466.8
Fabricated metal products	1,548.5	1,478.4	1,468.4	1,465.6	1,461.1	1,461.3	1,468.1	1,471.2	1,471.8	1,476.6	1,478.5	1,486.7	1,494.5	1,496.6	1,500.0
Machinery	1,229.5	1,153.5	1,145.5	1,140.8	1,139.4	1,137.0	1,142.5	1,140.4	1,138.7	1,141.2	1,145.1	1,152.0	1,153.3	1,156.8	1,162.0
Computer and electronic products[1]	1,507.2	1,360.9	1,348.7	1,343.8	1,339.2	1,332.8	1,334.4	1,332.2	1,333.2	1,333.9	1,338.0	1,339.7	1,345.8	1,345.8	1,352.4
Computer and peripheral equipment	250.0	225.7	224.0	222.5	221.9	219.3	219.1	217.8	219.4	219.0	218.6	218.1	218.8	217.2	217.4
Communications equipment	185.8	157.0	155.8	155.0	154.1	1 53.9	154.4	153.0	154.8	154.8	155.0	155.1	155.9	157.1	158.8
Semiconductors and electronic components	524.5	461.8	457.9	456.2	453.3	449.4	451.2	451.3	450.2	451.4	452.1	453.4	455.8	458.0	460.0
Electronic instruments	450.0	429.3	424.7	425.2	425.5	425.1	425.2	425.3	423.7	423.3	426.8	427.5	430.1	430.1	432.5
Electrical equipment and appliances	496.5	459.9	457.7	453.8	452.1	450.8	450.9	451.2	449.8	448.6	446.8	446.5	447.3	448.3	449.2
Transportation equipment	1,828.9	1,775.4	1,759.8	1,766.5	1,765.6	1,765.5	1,766.5	1,762.7	1,760.6	1,766.5	1,769.1	1,768.8	1,764.4	1,761.0	1,740.5
Furniture and related products	604.1	573.5	572.6	568.1	568.0	568.2	568.9	569.3	571.3	571.2	573.4	576.5	577.6	578.6	583.5
Miscellaneous manufacturing	688.3	662.8	660.2	657.9	655.9	655.2	652.7	651.9	652.0	653.0	653.0	653.0	654.4	653.9	654.9
Nondurable goods	5,775	5,555	5,544	5,518	5,508	5,497	5,470	5,456	5,445	5,439	5,445	5,441	5,450	5,442	5,448
Production workers	4,239	4,043	4,032	4,005	4,000	3,992	3,959	3,965	3,954	3,950	3,957	3,959	3,971	3,965	3,976
Food manufacturing	1,525.7	1,518.7	1,522.1	1,523.8	1,526.0	1,528.2	1,508.3	1,506.3	1,500.7	1,502.4	1,504.5	1,502.7	1,507.0	1,505.3	1,509.0
Beverages and tobacco products	207.4	200.6	200.7	201.0	200.2	201.0	198.3	198.3	197.7	195.9	197.2	197.8	197.5	198.2	198.1
Textile mills	290.9	260.3	256.9	251.8	250.2	247.0	245.1	241.0	239.2	237.3	237.1	235.8	236.1	235.1	236.3
Textile product mills	194.6	179.8	178.7	170.7	173.7	172.6	175.2	174.3	176.9	176.6	179.7	180.1	181.4	179.4	178.6
Apparel	359.7	312.7	307.5	304.0	299.8	299.7	297.7	297.7	296.1	297.1	294.3	292.7	290.8	188.4	287.6
Leather and allied products	50.2	45.2	44.9	44.3	44.2	43.7	44.1	44.3	44.6	44.8	44.8	44.6	45.1	45.0	45.8
Paper and paper products	546.6	519.0	516.3	515.1	513.8	513.3	511.7	510.3	509.8	508.0	508.8	507.0	508.1	506.3	509.2
Printing and related support activities	706.6	680.0	681.1	678.8	676.2	673.3	673.1	670.1	667.6	665.0	664.4	663.6	665.9	667.1	665.1
Petroleum and coal products	118.1	114.6	114.6	113.8	112.9	112.6	112.0	112.4	114.3	112.9	113.1	112.6	113.1	113.6	113.0
Chemicals	927.5	7.9	908.2	905.4	902.7	899.1	897.6	895.9	893.7	894.7	894.9	896.4	895.0	894.4	893.2
Plastics and rubber products	848.0	815.9	813.1	808.8	808.4	806.3	806.5	805.8	804.8	803.9	806.3	807.5	810.2	809.6	812.3
SERVICE-PROVIDING	107,784	108,114	108,070	108,077	108,159	108,270	108,341	108,367	108,498	108,593	108,852	109,132	109,268	109,344	109,358
PRIVATE SERVICE-PROVIDING	86,271	86,538	86,509	82,497	86,620	86,710	86,797	86,823	86,971	87,054	87,299	87,560	87,724	87,815	87,829
Trade, transportation, and utilities	25,497	25,275	25,225	25,225	25,252	25,272	25,261	25,211	25,312	25,331	25,415	25,448	25,477	25,502	25,491
Wholesale trade	5,652.3	5,605.0	5,596.8	5,589.0	5,585.1	5,581.6	5,592.7	5,598.4	5,611.4	5,612.2	5,623.5	5,632.5	5,636.7	5,638.5	5,646.6
Durable goods	3,007.9	2,949.2	2,942.5	2,936.2	2,932.1	2,932.0	2,943.9	2,945.8	2,954.9	2,953.8	2,963.4	2,967.5	2,969.7	2,975.4	2,985.9
Nondurable goods	2,015.0	2,002.1	2,001.6	1,997.9	1,995.9	1,992.4	1,989.2	1,991.8	1,993.7	1,994.5	1,995.3	1,996.3	1,997.2	1,993.0	1,989.3
Electronic markets and agents and brokers	629.4	654.3	652.7	651.9	6657.1	657.2	659.6	660.8	662.8	663.9	664.8	668.7	669.8	670.1	671.4
Retail trade	15,025.1	14,911.5	14,896.5	14,911.6	14,926.8	14,948.1	14,921.7	14,876.0	14,944.8	14,963.0	15,013.0	15,037.1	15,047.6	15,054.7	15,035.6
Motor vehicles and parts dealers[1]	1,879.4	1,883.5	1,883.7	1,883.5	1,889.8	1,889.7	1,892.9	1,893.7	1,895.4	1,900.9	1,906.9	1,910.9	1,911.4	1,908.7	1,908.2
Automobile dealers	1,252.8	1,255.1	1,256.9	1,257.0	1,259.7	1,259.6	1,258.9	1,259.5	1,261.3	1,262.9	1,263.9	1,264.7	1,263.6	1,262.5	1,260.9
Furniture and home furnishings stores	538.7	542.9	540.1	538.0	539.7	540.2	544.8	547.2	546.4	544.5	544.8	544.5	545.7	546.2	548.0
Electronics and appliance stores	525.3	511.9	507.2	507.4	506.7	506.5	512.8	511.9	509.3	508.2	511.7	514.1	512.6	512.3	511.2

See notes at end of table.

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
Building material and garden supply stores	1,176.5	1,191.1	1,188.3	1,194.7	1,203.4	1,204.0	1,210.0	1,209.5	1,221.4	1,231.4	1,243.5	1,247.3	1,248.7	1,244.9	1,243.5
Food and beverage stores	2,881.6	2,840.9	2,835.6	2,833.6	2,829.4	2,838.7	2,821.4	2,813.9	2,826.3	2,831.3	2,838.9	2,839.9	2,845.3	2,841.0	2,836.0
Health and personal care stores	938.8	943.1	941.4	941.0	943.1	948.3	951.6	952.6	954.1	954.9	958.2	957.9	957.1	957.2	955.2
Gasoline stations	895.9	879.9	877.9	881.4	877.9	873.8	875.2	871.1	875..1	871.8	873.0	872.4	871.6	870.3	867.7
Clothing and clothing accessories stores	1,312.5	1,296.7	1,294.0	1,294.8	1,295.6	1,302.6	1,297.1	1,301.0	1,304.3	1,311.3	1,321.8	1,328.0	1,335.5	1,347.1	1,347.9
Sporting goods, hobby, book, and music stores	661.3	645.0	644.1	642.5	642.8	642.0	641.6	633.2	635.9	636.8	636.5	635.8	636.1	635.6	634.3
General merchandise stores[1]	2,812.0	2,815.2	2,820.4	2,834.9	2,839.9	2,842.9	2,826.4	2,793.4	2,822.7	2,822.5	2,824.4	2,831.0	2,830.5	2836.8	2830.9
Department stores	1,684.0	1,618.8	1,613.7	1,622.3	1,623.7	1,623.5	1,612.6	1,601.3	1,603.4	1,602.7	1,604.9	16.7	1,610.9	1,614.7	1,613.2
Miscellaneous store retailers	959.5	934.1	934.0	931.9	931.7	933.5	930.9	924.4	929.6	924.6	926.9	927.9	925.7	926.5	924.2
Nonstore retailers	443.7	427.5	429.8	427.9	426.8	425.9	417.3	424.1	424.3	424.8	427.4	429.8	427.4	428.1	428.5
Transportation and warehousing	4,223.6	4,176.7	4,153.6	4,148.4	4,160.8	4,162.9	4,168.0	4,157.0	4,175.9	4,175.8	4,197.0	4,196.5	4,209.9	4226.0	4225.6
Air transportation	563.5	527.3	513.8	512.4	511.8	506.1	511.5	512.9	510.2	511.6	512.9	513.3	514.7	514.9	514.6
Rail transportation	217.8	215.4	216.1	213.8	215.6	215.2	215.5	215.5	215.4	215.7	216.0	216.3	216.4	217.3	217.7
Water transportation	52.6	52.5	53.1	52.9	51.5	52.5	50.9	50.0	50.6	48.8	49.2	50.6	51.1	52.0	52.2
Truck transportation	1,339.3	1,328.0	1,324.3	1,329.6	1,328.7	1,329.3	1,335.7	1,338.7	1,343.6	1,344.1	1,346.4	1,352.2	1,353.9	1,358.6	1,358.6
Transit and ground passenger transportation	380.8	380.3	372.8	371.2	380.7	389.2	385.7	385.0	382.3	380.1	380.5	372.3	381.5	382.9	379.0
Pipeline transportation	41.7	40.0	40.1	39.5	39.3	39.0	38.7	38.8	38.3	38.2	38.1	38.1	38.3	38.3	38.4
Scenic and sightseeing transportation	25.6	28.0	29.1	28.9	28.9	29.0	28.7	29.4	28.7	29.7	31.4	31.1	30.6	30.0	29.4
Support activities for transportation	524.7	516.3	513.4	512.2	515.4	514.3	512.4	511.6	514.1	515.5	518.5	519.1	519.5	519.9	519.8
Couriers and messengers	560.9	566.6	569.5	566.7	566.5	565.0	564.7	559.0	566.9	567.7	572.1	570.9	572.8	577.3	577.0
Warehousing and storage	516.7	522.3	521.4	521.2	522.4	522.6	524.2	516.1	525.8	524.4	531.9	532.6	531.1	534.8	538.9
Utilities	596.2	580.8	578.1	578.8	578.9	579.2	578.9	579.3	580.2	580.0	581.2	582.1	582.3	582.3	582.9
Information	3,395	3,198	3,188	3,174	3,175	3,166	3,172	3,175	3,163	3,169	3,169	3,173	3,177	3,175	3,170
Publishing industries, except Internet	964.1	926.4	922.7	922.0	919.3	918.0	918.4	917.4	914.0	915.1	915.3	916.3	916.2	917.1	915.4
Motion picture and sound recording industries	387.9	376.1	376.6	369.9	375.4	373.4	382.7	385.2	379.7	382.7	381.2	385.7	390.8	387.6	385.4
Broadcasting, except Internet	334.1	327.0	326.5	325.5	327.6	326.0	327.0	329.5	329.7	331.8	333.0	333.3	335.4	335.8	336.8
Internet publishing and broadcasting	33.7	30.0	30.1	30.0	30.1	29.9	30.4	30.4	30.8	31.9	31.9	32.5	32.5	33.5	33.4
Telecommunications	1,186.5	1,082.6	1,075.3	1,071.3	1,069.4	1,065.2	1,062.2	1,061.2	1,061.3	1,058.2	1,055.0	1,051.9	1,047.3	1,045.5	1,043.8
ISPs, search portals, and data processing	441.0	407.5	409.5	407.6	405.4	404.8	402.6	402.6	400.1	401.1	403.7	404.0	405.1	406.1	405.9
Other information services	47.3	48.1	47.3	47.8	48.0	48.3	48.2	48.2	47.8	48.0	48.6	49.6	49.6	49.7	49.6
Financial activities	7,847	7,974	7,995	7,996	8,004	7,990	7,985	7,981	7,981	7,989	8,003	8,015	8,029	8,036	8,013
Finance and insurance	5,817.3	5,920.5	5,936.8	5,936.8	5,945.6	5,930.2	5,922.7	5,916.5	5,917.1	5,924.7	5,933.0	5,947.7	5,946.0	5,954.5	5,929.3
Monetary authorities—central bank	23.4	22.7	22.7	22.6	22.6	22.5	22.5	22.5	22.4	22.4	22.3	22.3	21.8	21.8	21.4
Credit intermediation and related activities[1]	2,686.0	2,785.6	2,802.6	2,806.0	2,808.1	2,801.0	2,790.3	2,783.3	2,785.3	2,787.2	2,793.8	2,802.1	2,800.8	2,804.2	2,788.4
Depository credit intermediation[1]	1,733.0	1,752.1	1,755.1	1,756.0	1,757.9	1,760.1	1,758.1	1,757.1	1,758.7	1,762.6	1,762.8	1,765.0	1,765.2	1,767.8	1,764.1
Commercial banking	1,278.1	1,281.1	1,283.2	1,283.9	1,283.6	1,284.4	1,280.5	1,278.9	1,280.4	1,283.5	1,284.1	1,285.0	1,284.2	1,284.9	1,281.3
Securities, commodity contracts, investments	789.4	764.4	760.4	758.7	761.7	762.0	769.1	771.9	773.8	778.2	780.8	781.0	782.8	786.1	781.7
Insurance carriers and related activities	2,233.2	2,266.1	2,269.7	2,268.7	2,271.9	2,264.7	2,261.2	2,258.1	2,255.8	2,257.4	2,257.1	2,259.5	2,262.7	2,264.7	2,259.7
Funds, trusts, and other financial vehicles	85.4	81.7	81.4	80.8	81.3	80.0	79.6	80.7	79.8	79.5	79.0	78.8	77.9	77.7	78.1
Real estate and rental and leasing	2,029.8	2,053.6	2,057.8	2,058.8	2,057.9	2,060.2	2,062.7	2,064.0	2,063.6	2,064.5	2,069.5	2,071.6	2,083.1	2,081.9	2,083.4
Real estate	1,352.9	1,384.4	1,385.3	1,386.6	1,388.8	1,390.6	1,394.5	1,395.7	1,397.7	1,400.2	1,405.8	1,409.2	1,418.7	1,416.9	1,418.4
Rental and leasing services	649.1	640.8	643.9	643.4	639.8	639.9	639.0	638.3	636.0	634.2	634.1	633.2	635.4	636.1	636.5
Lessors of nonfinancial intangible assets	27.6	28.4	28.6	28.8	29.3	29.7	29.2	30.0	29.9	30.1	29.6	29.2	29.0	28.9	28.5
Professional and business services	15,976	15,999	16,021	15,998	16,051	16,070	16,114	16,159	16,172	16,196	16,237	16,363	16,432	16,451	16,493
Professional and technical services[1]	6,675.6	6,623.5	6,585.7	6,578.1	6,606.3	6,624.1	6,647.9	6,669.3	6,657.9	6,658.1	6,679.8	6,701.4	6,708.1	6,731.8	6,742.4
Legal services	1,115.3	1,136.8	1,135.0	1,133.8	1,136.6	1,140.4	1,142.9	1,140.5	1,138.7	1,139.2	1,138.4	1,141.9	1,143.3	1,147.0	1,149.2
Accounting and bookkeeping services	837.3	815.6	800.7	800.7	802.5	801.5	810.6	826.6	815.2	813.3	812.8	818.5	806.3	807.9	809.0
Architectural and engineering services	1,246.1	1,228.0	1,224.6	1,222.0	1,230.1	1,230.9	1,233.9	1,235.2	1,230.9	1,240.0	1,246.4	1,254.1	1,258.3	1,262.4	1,264.3

See notes at end of table.

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2003						2004						
	2002	2003	July	Aug	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
Computer systems design and related services	1,152.8	1,108.3	1,100.7	1,094.5	1,103.3	1,107.0	1,105.7	1,105.7	1,104.6	1,099.8	1,103.5	1,103.5	1,110.1	1,118.6	1,122.8
Management and technical consulting services	734.4	747.3	742.5	744.2	749.3	755.6	760.6	764.0	765.4	767.9	774.0	780.9	785.9	791.4	791.0
Management of companies and enterprises	1,705.4	1,675.5	1,680.3	1,671.4	1,671.7	1,669.1	1,671.6	1,670.2	1,675.1	1,675.6	1,676.6	1,679.7	1,683.3	1,686.7	1,690.6
Administrative and waste services	7,595.2	7,698.3	7,754.7	7,748.1	7,773.1	7,776.3	7,794.5	7,819.2	7,838.5	7,862.4	7,880.1	7,982.3	8,040.1	8,032.3	8,059.8
Administrative and support services[1]	7,276.8	73,764.0	7,426.5	7,427.0	7,451.6	7,456.0	7,473.7	7,496.3	7,517.5	7,539.6	7,556.8	7,657.0	7,715.6	7,705.8	7,733.1
Employment services[1]	3,246.5	3,336.2	3,369.6	3,366.2	3,389.1	3,402.0	3,427.6	3,461.3	3,473.8	3,493.8	3,492.3	3,553.7	3,591.5	3,566.3	3,593.3
Temporary help services	2,193.7	2,243.2	2,248.8	2,262.3	2,287.2	2,291.7	2,319.4	2,355.3	2,344.3	2,370.4	2,380.3	2,423.8	2,451.7	2,441.2	2,446.1
Business support services	756.6	747.4	744.2	748.7	753.2	753.2	746.7	745.1	739.0	739.8	746.0	748.6	751.2	755.7	754.8
Services to buildings and dwellings	1,606.1	1,631.7	1,643.8	1,648.4	1,645.2	1,639.6	1,639.4	1,635.9	1,637.1	1,639.5	1,646.2	1,674.5	1,686.0	1,694.3	1,692.5
Waste management and remediation services	318.3	321.9	328.2	321.1	321.5	320.3	320.8	322.9	321	322.8	323.3	325.3	324.5	326.5	326.7
Educational and health services	16,199	16,577	16,568	16,591	16,672	16,678	16,705	16,731	16,746	16,764	16,813	16,854	16,871	16,891	16,911
Educational services	2,642.8	2,688.5	2,676.4	2,673.9	2,689.1	2,707.7	2,723.1	2,728.0	2,729.3	2,727.4	2,736.0	2,740.8	2,731.1	2,727.5	2,727.3
Health care and social assistance	13,555.7	13,888.0	13,891.3	13,916.8	13,933.3	13,970.0	13,981.5	14,003.2	14,017.1	14,036.8	14,077.1	14,113.1	14,140.1	14,163.1	14,183.3
Ambulatory health care services[1]	4,633.2	4,776.0	4,783.4	4,791.9	4,792.8	4,812.8	4,818.7	4,831.0	4,840.3	4,855.3	4,868.0	4,883.6	4,896.8	4,907.7	4,922.3
Offices of physicians	1,967.8	2,003.8	2,004.6	2,007.1	2,008.2	2,018.5	2,023.3	2,030.0	2,032.3	2,034.4	2,043.5	2,046.1	2,049.6	2,052.4	2,054.1
Outpatient care centers	413.0	423.1	422.8	423.5	422.9	423.3	426.4	425.0	427.8	431.1	430.3	432.2	435.1	436.2	440.5
Home health care services	679.8	727.1	732.0	733.7	732.8	737.7	735.7	739.9	740.2	741.5	743.8	748.4	751.7	756.1	761.4
Hospitals	4,159.6	4,252.5	4,247.4	4,260.2	4,264.4	4,268.9	4,278.1	4,283.9	4,287.8	4,284.1	4,298.0	4,305.1	4,315.4	4,319.7	4,323.8
Nursing and residential care facilities[1]	2,743.3	2,784.3	2,784.2	2,787.7	2,789.3	2,794.2	2,792.8	2,793.0	2,792.1	2,791.1	2,798.4	2,802.8	2,806.3	2,808.4	2,811.6
Nursing care facilities	1,573.2	1,582.8	1,582.8	1,580.5	1,583.1	1,585.2	1,584.1	1,581.7	1,580.3	1,578.7	1,582.1	1,584.0	1,585.3	1,586.2	1,587.2
Social assistance[1]	2,019.7	2,075.2	2,076.3	2,080.0	2,086.8	2,094.1	2,091.9	2,095.3	2,096.9	2,106.3	2,112.7	2,121.6	2,121.6	2,127.3	2,125.6
Child day care services	744.1	760.5	761.1	764.5	765.8	771.6	766.3	770	766.3	772.2	773.7	777.6	777.1	784.7	791.9
Leisure and hospitality	11,986	12,128	12,118	12,117	12,126	12,147	12,178	12,192	12,218	12,229	12,271	12,303	12,331	12,341	12,339
Arts, entertainment, and recreation	1,782.6	1,801.0	1,797.7	1,795.0	1,794.4	1,796.9	1,799.4	1,795.2	1,801.4	1,796.7	1,798.7	1,791.1	1,793.1	1,790.2	1,785.4
Performing arts and spectator sports	363.7	370.2	366.2	366.7	372.0	369.6	371.7	368.8	369.4	366.5	364.6	361.4	358.8	359.1	354.1
Museums, historical sites, zoos, and parks	114.0	114.1	114.6	114.5	113.4	114.2	113.3	113.1	113.4	113.7	114.2	114.6	115.6	115.0	116.4
Amusements, gambling, and recreation	1,305.0	1,316.6	1,316.9	1,313.8	1,309.0	1,313.1	1,314.4	1,313.3	1,318.6	1,316.5	1,319.9	1,315.1	1,318.7	1,316.1	1,314.9
Accommodations and food services	10,203.2	10,324.4	10,319.9	10,321.8	10,331.7	10,350.4	10,378.9	10,396.3	10,416.5	10,432.3	10,742.0	10,511.8	105,837.9	10,550.4	10,553.6
Accommodations	1,778.6	1,765.2	1,762.5	1,755.0	1,739.1	1,733.7	1,751.7	1,763.0	1,752.1	1,754.4	1,753.4	1,758.5	1,758.5	1,763.1	1,758.5
Food services and drinking places	8,424.6	8,559.2	8,557.4	8,566.8	8,592.6	8,616.7	8,627.2	8,633.3	8,664.4	8,677.9	8,718.6	8,753.3	8,779.4	8,787.3	8,795.1
Other services	5,372	5,393	5,394	5,396	5,390	5,387	5,382	5,374	5,379	5,376	5,391	5,404	5,407	5,419	5,412
Repair and maintenance	1,246.9	1,236.2	1,238.7	1,242.4	1,240.4	1,237.6	1,234.4	1,228.5	1,233.5	1,230.5	1,239.4	1,238.2	1,237.7	1,235.4	1,235.1
Personal and laundry services	1,257.2	1,258.2	1,258.8	1,257.3	1,252.7	1,254.6	1,254.1	1,250.2	1,251.2	1,247.6	1,255.9	1,260.5	1,265.5	1,269.1	1,265.1
Membership associations and organizations	2,867.8	2,898.0	2,896.3	2,895.9	2,896.5	2,895.2	2,893.9	2,895.7	2,894.5	2,898.3	2,895.2	2,904.8	2,903.7	2,914.3	2,912.2
Government	21,513	21,575	21,561	21,580	21,539	21,560	21,544	21,544	21,527	21,539	21,553	21,572	21,544	21,529	21,529
Federal	2,767	2,756	2,758	2,750	2,747	2,736	2,723	2,720	2,715	2,716	2,710	2,727	2,712	2,715	2,710
Federal, except U.S. Postal Service	1,923.8	1,947.0	1,947.8	1,942.2	1,942.1	1,932.9	1,924.9	1,928.9	1,921.5	1,923.8	1,921.1	1,939.5	1,925.7	1,928.9	1,923.7
U.S. Postal Service	842.4	809.1	810.2	808.0	804.8	803.3	798.1	791.4	793.1	791.7	789.1	787.3	786.5	785.7	786.5
State	5,029	5,017	4,990	4,997	5,019	5,031	5,023	5,027	5,007	5,018	5,023	5,019	5,004	4,998	4,998
Education	2,242.8	2,266.4	2,249.0	2,258.7	2,278.8	2,290.4	2,282.5	2,285.7	2,268.0	2,279.6	2,283.2	2,278.3	2,261.4	2,255.1	2,255.2
Other State government	2,786.3	2,750.7	2,740.8	2,738.2	2,740.4	2,740.4	2,740.0	2,740.9	2,738.9	2,738.4	2,739.7	2,740.6	2,742.8	2,743.2	2,742.4
Local	13,718	13,802	13,813	13,833	13,773	13,793	13,798	13,797	13,805	13,805	13,820	13,826	13,828	13,816	13,821
Education	7,654.4	7,699.1	7,721.2	7,742.4	7,673.9	7,687.0	7,684.5	7,687.1	7,692.2	7,694.3	7,704.7	7,710.9	7,710.2	7,704.7	7,707.6
Other local government	6,063.2	6,104.0	6,091.5	6,090.1	6,099.3	6,105.9	6,113.1	6,109.7	6,112.7	6,110.8	6,114.8	6,115.4	6,117.9	6,111.2	6,113.1

[1] Includes other industries not shown separately.

p = preliminary.

NOTE: Data reflect the conversion to the 2002 version of the North American industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision. preliminary.

13. Average weekly hours of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
TOTAL PRIVATE	33.9	33.7	33.6	33.6	33.6	33.7	33.8	33.6	33.8	33.8	33.8	33.7	33.8	33.6	33.7
GOODS-PRODUCING	39.9	39.8	39.6	39.7	39.8	39.9	40.1	39.9	40.2	40.3	40.2	40.0	40.3	40.0	40.2
Natural resources and mining	43.2	43.6	43.3	43.6	43.6	43.7	43.9	43.6	44.5	44.1	44.2	44.3	44.2	44.1	44.2
Construction	38.4	38.4	38.3	38.5	38.4	38.4	38.5	38.1	38.5	38.5	38.6	38.2	38.3	38.1	38.4
Manufacturing	40.5	40.4	40.1	40.2	40.4	40.5	40.8	40.6	41.0	41.0	40.9	40.7	41.1	40.8	40.9
Overtime hours	4.2	4.2	4.1	4.1	4.2	4.3	4.5	4.5	4.5	4.6	4.6	4.5	4.6	4.6	4.6
Durable goods	40.8	40.8	40.5	40.5	40.8	40.9	41.3	41.2	41.5	41.5	41.4	41.2	41.6	41.2	41.4
Overtime hours	4.2	4.3	4.1	4.2	4.3	4.4	4.7	4.7	4.7	4.8	4.8	4.7	4.8	4.7	4.7
Wood products	39.9	40.4	40.7	40.4	40.4	40.6	41.2	41.0	40.9	41.1	41.0	41.0	41.4	40.5	40.9
Nonmetallic mineral products	42.0	42.2	41.8	42.1	41.9	42.1	42.4	42.3	42.5	42.5	42.9	42.3	42.0	41.8	42.1
Primary metals	42.4	42.3	41.7	41.9	42.2	42.3	42.7	42.7	43.1	43.0	43.2	43.1	43.4	43.4	43.3
Fabricated metal products	40.6	40.7	40.5	40.5	40.7	40.8	40.9	40.8	41.2	41.2	41.1	41.0	41.3	41.0	41.3
Machinery	40.5	40.8	40.4	40.7	41.0	40.9	41.1	41.1	41.8	41.8	41.7	41.6	42.3	42.0	42.3
Computer and electronic products	39.7	40.4	40.5	41.0	40.6	40.7	40.7	40.4	40.8	41.2	40.7	40.5	40.8	40.5	41.2
Electrical equipment and appliances	40.1	40.6	40.5	40.6	40.6	40.9	40.8	40.7	41.1	40.7	40.8	40.8	41.6	40.8	40.9
Transportation equipment	42.5	41.9	41.3	40.7	42.0	41.9	42.7	42.7	42.8	42.9	42.8	42.4	42.8	42.3	42.5
Furniture and related products	39.2	38.9	38.9	39.1	39.1	39.1	39.9	39.7	39.7	39.4	39.6	39.5	40.0	39.7	39.4
Miscellaneous manufacturing	38.6	38.4	38.3	38.1	38.3	38.3	38.9	38.5	39.0	38.7	38.7	38.3	38.9	38.4	38.7
Nondurable goods	40.1	39.8	39.4	39.6	39.8	39.9	40.1	39.9	40.2	40.3	40.1	40.0	40.3	40.1	40.0
Overtime hours	4.2	4.1	4.0	3.6	4.1	4.1	4.3	4.2	4.3	4.3	4.3	4.3	4.4	4.4	4.4
Food manufacturing	39.6	39.3	39.1	39.2	39.3	39.3	39.2	39.1	39.5	39.4	39.3	39.1	39.6	39.4	39.1
Beverage and tobacco products	39.4	39.1	38.4	38.8	39.1	38.8	39.9	39.1	39.6	40.3	39.4	39.6	39.2	38.7	38.7
Textile mills	40.6	39.1	37.7	38.7	39.0	39.1	40.0	39.7	40.0	40.0	40.2	39.5	40.3	40.3	40.7
Textile product mills	39.2	39.6	39.8	40.0	40.7	40.4	40.0	39.8	39.4	39.9	38.8	38.3	38.8	38.9	38.8
Apparel	36.7	35.6	34.6	34.8	35.1	35.8	36.2	35.8	35.7	36.2	36.3	35.9	36.1	35.9	35.9
Leather and allied products	37.5	39.3	39.7	38.9	38.4	38.9	39.3	40.3	39.8	39.5	39.4	39.1	38.4	38.2	37.9
Paper and paper products	41.8	42.1	41.2	41.2	41.2	41.5	41..9	41.8	41.9	42.0	41.8	41.9	42.6	42.0	42.2
Printing and related support activities	38.4	38.2	38.0	38.0	38.2	38.5	38.4	38.2	38.6	38.6	38.4	38.4	38.6	38.5	38.7
Petroleum and coal products	43.0	44.5	44.0	44.4	44.2	44.9	45.6	44.2	43.8	44.1	43.7	43.9	45.0	44.9	44.8
Chemicals	42.3	42.4	42.0	42.3	42.2	42.0	42.7	42.5	42.9	43.2	43.0	43.0	42.9	42.5	42.8
Plastics and rubber products	40.6	40.4	40.1	40.3	40.5	40.6	40.7	40.4	40.8	40.9	40.9	40.7	40.9	40.8	40.5
PRIVATE SERVICE-PROVIDING	32.5	32.4	32.2	32.3	32.3	32.3	32.4	32.2	32.4	32.4	32.4	32.3	32.4	32.3	32.4
Trade, transportation, and utilities	33.6	33.5	33.4	33.5	33.5	33.6	33.6	33.5	33.6	33.7	33.6	33.5	33.5	33.4	33.5
Wholesale trade	38.0	37.8	37.8	37.9	37.8	38.0	38.0	37.8	37.9	38.0	38.0	38.0	37.8	37.6	37.9
Retail trade	30.9	30.9	30.7	30.9	30.9	30.9	30.9	30.8	31.0	30.9	30.8	30.7	30.7	30.6	30.7
Transportation and warehousing	36.8	36.9	36.9	36.9	36.9	37.1	37.0	36.7	36.9	37.2	36.9	36.9	37.3	36.9	37.1
Utilities	40.9	41.1	41.0	41.0	40.4	41.0	41.4	40.8	40.8	41.0	41.2	41.2	41.3	41.1	40.8
Information	36.5	36.2	36.3	36.2	36.1	36.1	36.3	36.2	36.2	36.3	36.3	36.3	36.4	36.5	36.3
Financial activities	35.6	35.5	35.5	35.5	35.4	35.5	35.5	35.3	35.7	35.5	35.5	35.6	35.8	35.4	35.5
Professional and business services	34.2	34.1	34.1	33.9	33.9	34.0	34.1	33.8	34.1	34.2	34.1	34.1	34.2	34.0	34.1
Education and health services	32.4	32.3	32.3	32.4	32.3	32.3	32.4	32.4	32.4	32.4	32.4	32.4	32.5	32.3	32.5
Leisure and hospitality	25.8	25.6	25.4	25.5	25.5	25.6	25.7	25.6	25.7	25.8	25.7	25.7	25.7	25.7	25.6
Other services	32.0	31.4	31.3	31.3	31.2	31.3	31.2	31.0	31.1	31.1	31.2	31.1	31.2	31.0	31.1

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

p = preliminary.

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

14. Average hourly earnings of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
TOTAL PRIVATE															
Current dollars	$14.95	$15.35	$15.40	$15.41	$15.41	$15.43	$15.46	$15.45	$15.49	$15.52	$15.55	$15.59	$15.63	$15.65	$15.70
Constant (1982) dollars	8.24	8.27	8.31	8.28	8.25	8.28	8.23	8.30	8.27	8.27	8.24	8.25	8.21	8.20	8.23
GOODS-PRODUCING	16.33	16.80	16.81	16.86	16.91	16.90	16.94	16.97	17.00	17.06	17.08	17.13	17.13	17.16	17.18
Natural resources and mining	17.19	17.58	17.57	17.62	17.66	17.72	17.79	17.91	17.95	18.01	18.10	18.08	18.10	18.24	18.21
Construction	18.52	18.95	15.97	19.01	19.05	19.06	19.06	19.04	19.11	19.18	19.17	19.20	19.20	19.20	19.22
Manufacturing	15.29	15.74	15.73	15.79	15.84	15.83	15.89	15.93	15.94	15.99	16.01	16.08	16.08	16.13	16.14
Excluding overtime	14.54	14.96	14.96	15.02	15.06	15.03	15.06	15.09	15.11	15.14	15.16	15.24	15.23	15.27	15.28
Durable goods	16.02	16.46	16.43	16.50	16.57	16.54	16.58	16.64	16.63	16.68	16.69	16.75	16.75	16.78	16.78
Nondurable goods	14.15	14.63	14.65	14.68	14.70	14.72	14.79	14.81	14.85	14.89	14.93	15.00	15.02	15.08	15.10
PRIVATE SERVICE-PROVIDING	14.56	14.96	15.02	15.02	15.01	15.03	15.06	15.05	15.08	15.10	15.13	15.17	15.23	15.25	15.30
Trade,transportation, and utilities	14.02	14.34	14.39	14.40	14.38	14.41	14.44	14.41	14.45	14.49	14.50	14.57	14.61	14.64	14.69
Wholesale trade	16.98	17.36	17.40	17.43	17.44	17.47	17.47	17.46	17.53	17.54	17.54	17.60	17.63	17.68	17.72
Retail trade	11.67	11.90	11.94	11.95	11.94	11.95	11.97	11.95	11.95	11.98	11.99	12.01	12.06	12.09	12.12
Transportation and warehousing	15.76	16.25	16.36	16.33	16.31	16.32	16.35	16.33	16.46	16.52	16.53	16.71	16.75	16.80	16.86
Utilities	23.96	24.76	24.80	24.99	24.96	25.17	25.36	25.13	25.32	25.35	25.38	25.67	25.46	25.42	25.53
Information	20.20	21.01	21.18	21.22	21.21	21.21	21.10	20.99	21.15	21.24	21.25	21.29	21.42	21.30	21.38
Financial activities	16.17	17.13	17.41	17.39	17.27	17.29	17.30	17.30	17.35	17.32	17.41	17.46	17.49	17.49	17.55
Professional and business services	16.81	17.20	17.20	17.20	17.19	17.25	17.29	17.25	17.24	17.25	17.27	17.29	17.36	17.41	17.44
Education and health services	15.21	15.64	15.64	15.69	15.70	15.73	15.77	15.81	15.87	15.90	15.96	15.99	16.06	16.12	16.17
Leisure and hospitality	8.58	8.76	8.78	8.77	8.78	8.78	8.82	8.84	8.85	8.86	8.87	8.86	8.86	8.84	8.88
Other services	13.72	13.84	13.82	13.82	13.81	13.80	13.81	13.80	13.84	13.84	13.87	13.84	13.85	13.86	13.87

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

p = preliminary.

NOTE: Data reflect the conversion to the 2002 version of the North American industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

15. Average hourly earnings of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry

Industry	Annual average		2003						2004						
	2002	2003	July	Aug	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
TOTAL PRIVATE	$14.95	$15.35	$15.29	$15.31	$15.44	$15.42	$15.52	$15.48	$15.56	$15.60	$15.55	$15.59	$15.63	$15.57	$15.59
Seasonally adjusted	15.18	15.47	15.40	15.41	15.41	15.41	15.43	15.45	15.49	15.52	15.55	15.59	15.63	15.65	15.70
GOODS-PRODUCING	16.33	16.8	16.85	16.92	17.01	16.95	16.98	17.03	16.94	16.95	17.00	17.09	17.10	17.14	17.19
Natural resources and mining	17.19	17.58	17.53	17.52	17.69	17.69	17.15	17.97	18.00	18.05	18.17	18.14	18.06	18.18	18.15
Construction	18.52	18.95	19.00	19.08	19.19	19.13	19.08	19.19	19.01	19.07	19.07	19.15	19.15	19.13	19.24
Manufacturing	15.29	15.74	15.68	15.76	15.87	15.81	15.92	16.05	15.98	15.99	16.01	16.07	16.05	16.09	16.05
Durable goods	16.02	16.46	16.32	16.48	16.62	16.55	16.64	16.78	16.66	16.68	16.69	16.72	16.71	16.76	16.63
Wood products	12.33	12.71	12.81	12.77	12.83	12.82	12.95	12.93	12.90	12.91	12.93	13.00	13.03	12.99	13.02
Nonmetallic mineral products	15.40	15.77	15.83	15.81	15.84	15.95	15.99	15.98	16.03	16.00	16.02	16.19	16.18	16.24	16.34
Primary metals	17.68	18.13	18.26	18.13	18.30	18.25	18.32	18.39	18.39	18.36	18.33	18.52	18.48	18.51	18.61
Fabricated metal products	14.68	15.01	15.00	15.04	15.09	15.03	15.06	15.23	15.20	15.18	15.25	15.21	15.20	15.24	15.29
Machinery	15.92	16.30	16.36	16.32	16.40	16.35	16.49	16.62	16.53	16.50	16.49	16.53	16.53	16.56	16.64
Computer and electronic products	16.20	16.68	16.79	16.81	16.77	16.77	16.78	16.85	16.81	16.92	16.93	17.01	17.11	17.22	17.41
Electrical equipment and appliances	13.98	14.35	14.31	14.45	14.49	14.37	14.54	14.68	14.50	14.58	14.68	14.80	14.83	14.89	14.91
Transportation equipment	20.64	21.25	20.76	21.29	21.56	21.35	21.48	21.74	21.38	21.37	21.34	21.36	21.29	21.38	20.80
Furniture and related products	12.61	12.98	12.97	13.04	13.10	13.01	13.08	13.08	12.95	12.92	12.96	13.09	13.04	13.11	13.16
Miscellaneous manufacturing	12.91	13.30	13.26	13.27	13.42	13.47	13.53	13.60	13.68	13.75	13.78	13.70	13.76	13.83	14.01
Nondurable goods	14.15	14.63	14.71	14.65	14.73	14.67	14.80	14.88	14.89	14.88	14.90	15.01	14.98	15.03	15.13
Food manufacturing	12.55	12.80	12.84	12.80	12.90	12.77	12.91	12.95	12.91	12.87	12.89	12.96	12.94	13.00	16.11
Beverages and tobacco products	17.73	17.96	17.86	17.75	17.73	18.05	18.64	18.58	18.88	18.76	19.13	19.60	19.55	19.35	19.48
Textile mills	11.73	12.00	11.97	11.95	12.07	12.02	12.08	12.21	12.11	12.13	12.09	12.23	12.08	12.13	12.00
Textile product mills	10.96	11.24	11.28	11.46	11.47	11.37	11.35	11.44	11.45	11.40	11.37	11.33	11.30	11.30	11.33
Apparel	9.10	9.56	9.68	9.75	9.77	9.69	9.71	9.80	9.74	9.58	9.60	9.71	9.55	9.60	9.66
Leather and allied products	11.00	11.67	11.52	11.67	11.63	11.83	11.87	11.90	11.94	11.76	11.64	11.65	11.49	11.59	11.66
Paper and paper products	16.85	17.32	17.45	17.33	17.41	17.44	17.58	17.60	17.63	17.55	17.59	17.84	17.88	17.86	17.90
Printing and related support activities	14.93	15.37	15.39	15.36	15.46	15.41	15.48	15.56	15.53	15.57	15.61	15.54	15.51	15.56	15.72
Petroleum and coal products	23.04	23.64	23.14	22.96	23.45	23.63	24.00	24.06	24.13	24.32	24.82	24.48	24.41	24.24	24.31
Chemicals	17.97	18.52	18.51	18.60	18.66	18.66	18.77	18.79	18.83	18.85	18.87	19.02	19.05	19.17	19.23
Plastics and rubber products	13.55	14.18	14.38	14.27	14.30	14.19	14.27	14.47	14.43	14.45	14.45	14.58	14.55	14.58	14.70
PRIVATE SERVICE-PROVIDING	14.56	14.96	14.87	14.88	15.00	15.01	15.13	15.07	15.19	15.24	15.16	15.20	15.24	15.14	15.15
Trade, transportation, and utilities	14.02	14.34	14.32	14.32	14.42	14.38	14.44	14.31	14.50	14.58	14.53	14.64	14.64	14.61	14.62
Wholesale trade	16.98	17.36	17.33	17.35	17.41	17.42	17.56	17.46	17.56	17.60	17.47	17.60	17.67	17.58	17.66
Retail trade	11.67	11.90	11.89	11.89	11.99	11.91	11.92	11.87	11.98	12.04	12.03	12.08	12.08	12.08	12.06
Transportation and warehousing	15.76	16.25	16.35	16.33	16.31	16.31	16.40	16.33	16.46	16.58	16.51	16.73	16.72	16.79	16.88
Utilities	23.96	24.76	24.64	24.81	25.15	25.23	25.50	25.26	25.38	25.29	25.36	25.69	25.53	25.30	25.40
Information	20.20	21.01	21.01	21.11	21.35	21.25	21.28	21.10	21.21	21.28	21.17	21.24	21.41	21.17	21.25
Financial activities	16.17	17.13	17.29	17.34	17.27	17.25	17.42	17.26	17.35	17.47	17.37	17.45	17.62	17.37	17.43
Professional and business services	16.81	17.20	17.07	17.00	17.11	17.13	17.41	17.29	17.38	17.47	17.28	17.26	17.45	17.29	17.31
Education and health services	15.21	15.64	15.62	15.68	15.71	15.73	15.79	15.86	15.94	15.95	15.94	15.99	16.00	16.06	16.14
Leisure and hospitality	8.58	8.76	8.68	8.68	8.78	8.78	8.83	8.94	8.89	8.92	8.89	8.84	8.85	8.78	8.80
Other services	13.72	13.84	13.72	13.75	13.82	13.78	13.85	13.88	13.89	13.90	13.85	13.87	13.90	13.81	13.77

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

16. Average weekly earnings of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry

Industry	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
TOTAL PRIVATE	$506.07	$517.36	$515.27	$519.01	$520.33	$519.65	$527.68	$520.13	$518.15	$527.28	$520.93	$522.27	$531.42	$524.71	$526.94
Seasonally adjusted	–	–	517.44	517.78	517.78	519.99	522.55	519.12	523.56	524.58	525.59	525.38	528.29	525.84	529.09
GOODS-PRODUCING	651.61	669.23	665.58	678.49	685.50	681.39	684.29	682.90	674.21	674.61	681.70	678.47	690.84	690.74	687.60
Natural resources and mining	741.97	766.83	757.30	772.63	780.13	778.36	784.55	781.70	784.80	786.98	797.66	794.53	798.25	814.46	809.49
Construction	711.82	727.11	741.00	753.66	752.25	744.16	730.76	714.34	712.88	711.31	732.29	721.96	741.11	738.42	754.21
Manufacturing	618.75	636.07	620.93	633.55	647.50	643.47	655.90	662.87	650.39	652.39	653.21	652.44	659.66	659.69	646.82
Durable goods	652.97	671.53	651.17	669.09	684.74	680.21	692.22	703.08	688.06	688.88	690.97	687.19	695.14	695.54	676.84
Wood products	492.00	513.92	521.37	519.74	526.03	525.62	537.43	531.42	517.29	521.56	524.96	530.40	544.65	533.89	532.52
Nonmetallic mineral products	646.91	665.11	666.44	675.09	676.37	679.47	681.17	669.56	663.64	664.00	680.85	684.84	684.41	690.20	692.82
Primary metals	749.32	767.63	750.49	754.21	777.75	771.98	785.93	799.97	796.29	787.64	790.02	800.06	803.88	808.89	785.34
Fabricated metal products	596.38	610.33	598.50	609.12	617.18	616.23	621.98	635.09	626.24	623.90	625.25	620.27	627.76	627.89	623.83
Machinery	645.55	664.79	651.13	660.96	672.40	667.08	682.69	696.38	689.30	691.35	690.93	987.65	700.87	698.83	690.56
Computer and electronic products	642.87	674.68	669.92	685.85	684.22	684.22	693.01	695.91	680.81	695.41	690.74	683.80	694.67	699.13	706.85
Electrical equipment and appliances	560.24	582.68	568.11	582.34	588.29	592.04	601.96	616.56	594.50	591.95	596.01	599.40	613.96	611.98	600.87
Transportation equipment	877.87	890.32	824.17	870.76	918.46	905.24	925.79	950.04	915.06	916.77	917.62	905.66	915.47	912.93	844.48
Furniture and related products	494.01	505.23	504.53	513.78	518.76	508.69	523.20	528.43	510.23	505.17	510.62	517.06	517.69	521.78	515.87
Miscellaneous manufacturing	499.13	510.69	501.23	505.59	515.33	515.90	530.38	533.12	532.15	533.50	534.66	524.71	535.26	531.07	533.78
Nondurable goods	566.84	582.65	575.16	581.61	593.62	588.27	600.88	602.64	594.11	595.20	596.00	595.90	602.20	604.21	600.66
Food manufacturing	496.91	502.61	499.48	506.88	517.29	505.69	515.11	514.12	504.78	499.36	498.84	497.66	511.13	512.20	511.29
Beverages and tobacco products	698.39	702.75	692.97	694.03	707.43	707.56	751.19	722.76	728.77	737.27	744.16	780.08	774.18	758.52	757.77
Textile mills	476.52	469.47	440.50	462.47	475.56	469.98	485.62	490.84	485.61	486.41	490.85	484.31	486.82	490.05	481.20
Textile product mills	429.01	445.08	446.69	459.55	467.98	458.21	456.27	464.46	447.70	450.30	441.16	435.07	436.18	445.22	435.07
Apparel	333.66	340.22	332.02	339.30	341.95	348.84	356.36	352.80	343.82	345.84	350.40	347.76	346.67	348.48	343.90
Leather and allied products	412.99	458.26	449.28	451.63	445.43	462.55	465.30	485.52	471.63	464.52	464.44	460.18	441.22	443.90	431.42
Paper and paper products	705.62	719.21	713.71	710.53	726.00	727.25	743.63	751.52	738.70	731.84	731.74	745.71	756.32	748.33	746.43
Printing and related support activities	573.05	587.42	578.66	585.22	599.85	597.91	603.72	602.17	593.25	597.89	600.99	593.63	594.03	594.39	602.08
Petroleum and coal products	990.88	1,052.97	1,022.79	1,007.94	1,045.87	1,068.08	1,099.20	1,061.05	1,068.96	1,074.94	1,079.67	1,062.43	1,091.13	1,098.07	1,123.12
Chemicals	759.53	784.56	771.87	784.92	793.05	785.59	808.99	806.09	804.04	816.21	811.41	814.06	815.34	818.56	813.43
Plastics and rubber products	549.85	572.23	566.57	572.23	583.44	578.95	586.50	596.16	585.86	588.12	589.56	594.86	595.10	599.24	583.59
PRIVATE SERVICE-PROVIDING	472.88	484.00	481.79	485.09	483.00	484.82	493.24	485.25	484.56	496.82	486.64	487.92	496.82	489.02	492.38
Trade, transportation, and utilities	471.27	481.10	484.02	485.45	485.95	483.17	486.63	480.82	477.05	488.43	482.40	486.05	493..37	489.44	494.16
Wholesale trade	644.38	657.12	653.34	659.30	658.10	661.96	676.06	659.99	656.74	670.56	658.62	665.28	674.99	661.01	667.55
Retail trade	360.81	367.28	373.35	373.35	371.69	366.83	365.94	367.97	361.80	368.42	365.71	367.23	372.06	373.27	377.48
Transportation and warehousing	579.75	597.79	603.32	604.21	606.73	603.47	615.00	602.58	597.50	613.46	604.27	610.65	627.00	621.23	627.94
Utilities	979.09	1,016.94	1,007.78	1,017.21	1,026.12	1,039.48	1,068.45	1,028.08	1,032.97	1,039.42	1,039.76	1,053.29	1,054.39	1,044.89	1,026.16
Information	738.17	761.13	762.66	768.40	770.74	769.25	783.10	761.71	763.56	776.72	760.00	764.64	777.18	774.82	771.38
Financial activities	575.51	608.87	610.34	613.84	607.90	608.93	628.86	607.55	612.10	630.67	611.42	615.99	637.84	611.42	615.28
Professional and business services	574.66	586.68	580.38	579.70	578.32	580.71	597.16	582.67	583.97	602.72	587.52	588.57	603.77	589.59	590.27
Education and health services	492.74	505.76	504.53	508.03	505.86	506.51	516.33	512.28	514.86	519.97	513.27	516.48	521.60	518.74	524.55
Leisure and hospitality	221.26	224.35	226.55	228.28	222.13	223.89	226.05	225.29	221.36	230.14	225.80	224.81	229.22	227.40	231.44
Other services	439.76	434.49	430.81	433.13	431.18	431.31	434.89	430.28	429.20	433.68	428.73	428.58	435.07	428.11	429.62

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

Dash indicates data not available. p = preliminary.

17. Diffusion indexes of employment change, seasonally adjusted

[In percent]

Timespan and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Private nonfarm payrolls, 278 industries											
Over 1-month span:												
2000	61.9	62.9	63.3	59.5	46.9	61.7	63.1	52.5	51.5	53.4	56.8	53.8
2001	52.2	47.8	50.4	34.4	41.4	39.2	37.1	38.8	38.3	32.4	36.7	34.9
2002	40.1	35.1	41.0	41.5	41.7	47.8	44.1	44.1	42.8	39.0	38.7	34.5
2003	41.2	35.1	38.1	41.4	42.8	40.1	40.5	39.7	49.3	46.0	51.1	49.1
2004	52.3	56.1	68.7	67.6	63.8	60.1	49.5					
Over 3-month span:												
2000	69.2	66.2	67.8	68.3	60.1	58.1	56.3	61.5	56.5	53.2	52.9	56.8
2001	52.7	50.4	50.4	43.5	38.8	34.9	36.2	37.9	34.7	35.3	30.8	32.0
2002	34.0	37.4	35.1	36.2	36.7	39.4	39.9	40.8	38.7	37.1	34.4	34.7
2003	36.5	32.6	36.3	35.1	40.5	42.6	37.4	35.4	40.1	45.5	50.5	51.1
2004	54.0	55.2	62.8	70.0	74.5	69.1	61.0					
Over 6-month span:												
2000	67.3	69.1	75.2	72.5	67.4	67.8	66.7	60.8	59.0	55.0	59.7	54.0
2001	51.8	50.0	51.8	47.3	43.5	41.5	38.1	35.4	32.2	33.1	31.5	31.1
2002	29.5	30.0	31.1	31.1	31.7	37.1	37.2	39.0	34.7	36.5	35.3	33.3
2003	33.6	31.1	31.7	31.7	33.5	37.8	36.2	36.5	40.5	39.4	42.6	41.7
2004	48.9	54.1	59.6	64.7	67.8	68.9	68.7					
Over 12-month span:												
2000	70.9	69.2	73.2	71.0	69.8	71.0	70.0	70.3	70.3	65.6	63.8	62.1
2001	59.5	59.5	53.4	49.3	48.6	45.0	43.3	43.9	39.9	37.8	37.1	34.9
2002	33.6	31.7	30.2	30.4	30.2	29.1	32.0	31.3	30.0	29.5	32.9	34.7
2003	34.5	31.5	32.9	33.5	36.2	34.4	34.7	33.1	37.6	37.4	33.1	35.4
2004	37.8	43.2	47.3	50.7	54.9	60.1	62.8					
	Manufacturing payrolls, 84 industries											
Over 1-month span:												
2000	48.2	58.3	50.0	50.0	41.1	57.1	60.7	28.6	25.0	35.1	39.9	41.1
2001	22.6	22.0	21.4	16.1	15.5	23.2	13.7	14.3	19.0	17.9	14.9	10.1
2002	21.4	18.5	23.8	35.1	29.8	32.7	40.5	28.0	31.0	11.9	15.5	17.9
2003	26.2	15.5	22.6	13.7	26.2	25.0	28.0	26.2	27.4	28.6	51.2	45.8
2004	42.9	55.4	60.1	66.1	64.9	51.2	54.2					
Over 3-month span:												
2000	53.6	53.6	56.0	54.8	44.0	44.0	51.2	47.6	32.7	25.0	23.2	38.7
2001	35.7	21.4	16.1	14.3	13.1	13.7	11.9	8.9	8.3	13.1	8.9	10.1
2002	9.5	10.1	11.3	17.9	17.3	19.0	28.0	22.0	23.8	15.5	6.5	4.8
2003	13.7	13.1	16.7	10.1	13.1	14.9	16.1	16.1	16.1	24.4	27.4	41.7
2004	48.8	51.8	59.5	66.1	71.4	65.5	60.1					
Over 6-month span:												
2000	44.0	52.4	55.4	57.7	47.6	51.8	56.0	45.2	39.3	34.5	32.1	27.4
2001	22.0	23.8	22.0	20.8	14.3	13.7	14.3	10.1	10.7	5.4	7.1	4.8
2002	6.5	8.9	7.7	8.3	7.7	14.3	14.9	10.7	12.5	10.1	8.9	8.9
2003	11.3	9.5	6.0	7.1	8.9	13.1	8.9	13.1	13.1	16.7	19.0	19.6
2004	28.6	36.9	46.4	56.5	61.3	61.9	66.7					
Over 12-month span:												
2000	41.7	39.3	47.0	50.0	46.4	52.4	51.8	49.4	46.4	40.5	35.1	33.3
2001	29.8	32.1	20.8	19.0	13.1	12.5	10.7	11.9	11.9	10.1	8.3	6.0
2002	7.1	6.0	6.0	6.5	7.1	3.6	4.8	6.0	4.8	7.1	4.8	8.3
2003	10.7	6.0	6.5	5.4	8.3	9.5	9.5	9.5	10.7	11.9	9.5	11.3
2004	9.5	19.0	16.7	26.2	29.8	38.7	50.0					

NOTE: Figures are the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment.

See the "Definitions" in this section. See "Notes on the data" for a description of the most recent benchmark revision.

Data for the two most recent months are preliminary.

18. Job openings levels and rates by industry and region, seasonally adjusted

Industry and region	Levels (in thousands)[1]							Rates						
	2004							2004						
	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Jan.	Feb.	Mar.	Apr.	May	June	July[p]
Total[2]	2,868	2,906	3,079	3,135	3,105	3,022	3,190	2.2	2.2	2.3	2.3	2.3	2.3	2.4
Industry														
Total private[2]	2,518	2,534	2,740	2,778	2,746	2,640	28 36	2.3	2.3	2.5	2.5	2.4	2.3	2.5
Construction	106	99	113	105	108	94	85	1.5	1.4	1.6	1.5	1.5	1.3	1.2
Manufacturing	233	226	232	251	244	247	230	1.6	1.6	1.6	1.7	1.7	1.7	1.6
Trade, transportation, and utilities	430	458	524	531	521	503	571	1.7	1.8	2.0	2.0	2.0	1.9	2.2
Professional and business services	501	491	502	518	530	494	529	3.0	2.9	3.0	3.1	3.1	2.9	3.1
Education and health services	549	551	559	576	542	496	513	3.2	3.2	3.2	3.3	3.1	2.9	2.9
Leisure and hospitality	368	383	370	376	391	421	457	2.9	3.0	2.9	3.0	3.1	3.3	3.5
Government	350	364	353	354	360	380	353	1.6	1.7	1.6	1.6	1.6	1..7	1.6
Region[3]														
Northeast	476	500	569	560	526	546	530	1.9	2.0	2.2	2.2	2.0	2.1	2.1
South	1,132	1,112	1,176	1,191	1,164	1,164	1,236	2.4	2.4	2.5	2.5	2.5	2.4	2.6
Midwest	679	680	663	692	688	631	655	2.2	2.2	2.1	2.2	2.2	2.0	2.1
West	586	632	655	694	765	677	725	2.0	2.2	2.2	2.4	2.6	2.3	2.5

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest**: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The job openings level is the number of job openings on the last business day of the month; the job openings rate is the number of job openings on the last business day of the month as a percent of total employment plus job openings.

[p] = preliminary.

19. Hires levels and rates by industry and region, seasonally adjusted

Industry and region	Levels (in thousands)[1]							Rates						
	2004							2004						
	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Jan.	Feb.	Mar.	Apr.	May	June	July[p]
Total[2]	4,106	4,103	4,603	4,398	4,206	4,433	4,233	3.2	3.2	3.5	3.4	3.2	3.4	3.2
Industry														
Total private[2]	3,800	3,772	4,256	4,090	3,938	4,110	3,936	3.5	3.5	3.9	3.7	3.6	3.7	3.6
Construction	358	382	437	421	406	436	351	5.3	5.6	6.4	6.1	5.9	6.3	5.1
Manufacturing	349	355	361	354	336	370	349	2.4	2.5	2.5	2.5	2.3	2.6	2.4
Trade, transportation, and utilities	957	945	1,009	1,032	938	945	939	3.8	3.7	4.0	4.1	3.7	3.7	3.7
Professional and business services	708	529	713	609	631	692	621	4.4	3.3	4.4	3.7	3.8	4.2	3.8
Education and health services	416	447	444	460	451	428	435	2.5	2.7	2.6	2.7	2.7	2.5	2.6
Leisure and hospitality	715	766	810	766	739	749	771	5.9	6.3	6.6	6.2	6.0	6.1	6.2
Government	295	323	343	300	272	328	301	1.4	1.5	1.6	1.4	1.3	1.5	1.4
Region[3]														
Northeast	722	689	744	810	708	703	760	2.9	2.8	3.0	3.2	2.8	2.8	3.0
South	1,585	1,608	1,781	1,582	1,606	1,709	1,628	3.4	3.5	3.9	3.4	3.5	3.7	3.5
Midwest	921	953	1,040	991	956	1,009	914	3.0	3.1	3.4	3.2	3.1	3.2	2.9
West	883	876	1,029	1,093	951	1,023	844	3.1	3.1	3.6	3.8	3.3	3.6	2.9

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast**: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The hires level is the number of hires during the entire month; the hires rate is the number of hires during the entire month as a percent of total employment.

[p] = preliminary.

20. Total separations levels and rates by industry and region, seasonally adjusted

Industry and region	Levels (in thousands)[1]							Rates						
	2004							2004						
	Jan.	Feb.	Mar.	Apr.	May	June	July[P]	Jan.	Feb.	Mar.	Apr	May	June	July[P]
Total[2]	3,968	4,073	4,134	4,088	4,040	4,069	4,011	3.0	3.1	3.2	3.1	3.1	3.1	3.1
Industry														
Total private[2]	3,716	3,807	3,868	3,843	3,761	3,789	3,725	3.4	3.5	3.5	3.5	3.4	3.5	3.4
Construction	436	400	392	391	367	382	380	6.4	5.9	5.7	5.7	5.3	5.5	5.5
Manufacturing	323	355	377	353	377	343	365	2.3	2.5	2.6	2.5	2.6	2.4	2.5
Trade, transportation, and utilities	936	899	978	1,013	917	927	939	3.7	3.5	3.8	4.0	3.6	3.6	3.7
Professional and business services	572	590	597	606	556	607	576	3.5	3.6	3.7	3.7	3.4	3.7	3.5
Education and health services	389	388	382	386	379	362	368	2.3	2.3	2.3	2.3	2.2	2.1	2.2
Leisure and hospitality	709	727	715	679	696	734	680	5.8	5.9	5.8	5.5	5.6	5.9	5.5
Government	258	268	284	245	268	270	273	1.2	1.2	1.3	1.1	1.2	1.3	1.3
Region[3]														
Northeast	712	688	666	716	648	704	699	2.9	2.8	2.7	2.9	2.6	2.8	2.8
South	1,505	1,499	1,612	1,524	1,504	1,533	1,505	3.3	3.3	3.5	3.3	3.2	3.3	3.2
Midwest	903	929	938	877	833	853	904	2.9	3.0	3.0	2.8	2.7	2.7	2.9
West	896	941	1,003	959	1,008	979	915	3.2	3.3	3.5	3.4	3.5	3.4	3.2

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington Wyoming.

NOTE: The total separations level is the number of total separations during the entir month; the total separations rate is the number of total separations during the entir month as a percent of total employment.

[P] = preliminary.

21. Quits levels and rates by industry and region, seasonally adjusted

Industry and region	Levels (in thousands)[1]							Rates						
	2004							2004						
	Jan.	Feb.	Mar.	Apr.	May	June	July[P]	Jan.	Feb.	Mar.	Apr.	May	June	July[P]
Total[2]	2,118	2,178	2,271	2,278	2,173	2,284	2,235	1.6	1.7	1.7	1.7	1.7	1.7	1.7
Industry														
Total private[2]	2,002	2,051	2,144	2,151	2,026	2,162	2,113	1.8	1.9	2.0	2.0	1.9	2.0	1.9
Construction	148	133	154	149	144	156	123	2.2	2.0	2.3	2.2	2.1	2.3	1.8
Manufacturing	165	169	176	189	171	171	180	1.2	1.2	1.2	1.3	1.2	1.2	1.3
Trade, transportation, and utilities	530	493	530	563	525	536	547	2.1	1.9	2.1	2.2	2.1	2.1	2.1
Professional and business services	261	302	309	323	259	322	306	1.6	1.9	1.9	2.0	1.6	2.0	1.9
Education and health services	237	234	252	245	223	225	264	1.4	1.4	1.5	1.5	1.3	1.3	1.6
Leisure and hospitality	428	447	465	429	455	480	430	3.5	3.7	3.8	3.5	3.7	3.9	3.5
Government	116	126	129	129	129	123	123	.5	.6	.6	.6	.6	.6	.6
Region[3]														
Northeast	288	319	314	390	318	334	347	1.2	1.3	1.3	1.6	1.3	1.3	1.4
South	852	867	957	888	857	910	869	1.9	1.9	2.1	1.9	1.8	2.0	1.9
Midwest	513	455	474	479	479	485	501	1.7	1.5	1.5	1.5	1.5	1.6	1.6
West	475	520	565	524	521	573	508	1.7	1.8	2.0	1.8	1.8	2.0	1.8

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest**: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The quits level is the number of quits during the entire month; the quits rate is the number of quits during the entire month as a percent of total employment.

[P] = preliminary.

22. Quarterly Census of Employment and Wages: 10 largest counties, fourth quarter 2003.

County by NAICS supersector	Establishments, fourth quarter 2003 (thousands)	Employment		Average weekly wage[1]	
		December 2003 (thousands)	Percent change, December 2002-03[2]	Fourth quarter 2003	Percent change, fourth quarter 2002-03[2]
United States[3]	8,314.1	129,341.5	0.0	$767	3.6
Private industry	8,048.7	108,215.1	.0	769	3.9
Natural resources and mining	123.7	1,557.8	.1	703	4.9
Construction	804.9	6,689.5	1.2	837	2.3
Manufacturing	376.8	14,307.8	-4.2	943	6.7
Trade, transportation, and utilities	1,853.6	25,957.3	-.3	665	3.4
Information	145.2	3,165.9	-4.0	1,139	3.9
Financial activities	767.0	7,874.7	1.2	1,138	5.9
Professional and business services	1,329.4	16,113.2	.6	945	3.8
Education and health services	732.2	15,974.0	2.1	731	3.8
Leisure and hospitality	669.9	12,042.8	1.7	335	3.4
Other services	1,080.6	4,274.1	-.1	494	3.1
Government	265.3	21,126.3	-.2	757	2.4
Los Angeles, CA	356.0	4,075.3	-.5	903	4.2
Private industry	352.2	3,486.3	-.2	898	4.2
Natural resources and mining	.6	11.0	.7	955	16.9
Construction	12.9	133.9	-1.1	883	1.7
Manufacturing	17.8	485.2	-7.1	900	6.5
Trade, transportation, and utilities	53.9	794.6	-1.2	735	2.7
Information	9.2	194.9	-2.0	1,627	5.2
Financial activities	23.0	237.9	.9	1,258	7.0
Professional and business services	40.1	575.0	1.6	1,043	3.7
Education and health services	26.6	456.5	1.9	820	3.9
Leisure and hospitality	25.6	375.9	5.6	766	6.5
Other services	142.1	220.7	3.5	422	5.0
Government	3.8	589.0	-2.3	930	3.3
Cook, IL	126.7	2,539.8	-1.2	922	3.0
Private industry	125.5	2,221.9	-.9	929	3.2
Natural resources and mining	.1	1.3	-3.6	1,037	3.2
Construction	10.5	96.7	.0	1,169	-.8
Manufacturing	7.9	265.7	-5.1	975	6.3
Trade, transportation, and utilities	26.7	499.4	-.8	753	.4
Information	2.5	66.1	-4.1	1,164	.1
Financial activities	13.8	219.4	-.8	1,471	8.1
Professional and business services	26.1	405.5	-1.3	1,206	4.1
Education and health services	12.3	350.8	1.0	791	3.7
Leisure and hospitality	10.5	217.7	2.8	375	-.3
Other services	12.6	95.1	-2.0	655	3.0
Government	1.2	317.9	-3.1	871	.9
New York, NY	111.9	2,253.6	-1.0	1,480	7.2
Private industry	111.7	1,800.4	-.6	1,623	8.1
Natural resources and mining	.0	.1	.0	1,197	-6.5
Construction	2.2	30.0	-4.5	1,567	3.4
Manufacturing	3.5	46.6	-4.9	1,290	6.4
Trade, transportation, and utilities	22.1	247.6	-1.2	1,164	5.5
Information	4.3	130.6	-5.1	1,751	7.9
Financial activities	16.7	352.0	-2.0	3,034	16.1
Professional and business services	22.6	439.7	.5	1,702	2.6
Education and health services	7.8	273.8	2.4	918	7.6
Leisure and hospitality	10.1	188.2	.4	787	6.1
Other services	16.0	82.9	-1.1	871	6.1
Government	.2	453.2	-2.2	912	.1
Harris, TX	89.4	1,841.5	-.9	906	2.1
Private industry	89.0	1,595.2	-1.2	929	2.1
Natural resources and mining	1.2	62.5	8.7	2,185	-.9
Construction	6.3	135.5	-5.0	919	2.6
Manufacturing	4.7	164.0	-4.9	1,106	2.3
Trade, transportation, and utilities	21.1	403.2	-2.1	821	1.0
Information	1.4	33.8	-3.9	1,098	.4
Financial activities	9.7	113.1	1.7	1,181	4.9
Professional and business services	17.0	279.0	-1.7	1,073	3.2
Education and health services	8.8	188.3	1.5	812	1.8
Leisure and hospitality	6.5	155.2	.7	335	-.9
Other services	10.3	56.3	-3.1	539	.4
Government	4	246.3	1.1	759	3.1
Maricopa, AZ	80.9	1,621.2	([4])	757	4.0
Private industry	80.5	1,401.8	2.2	755	3.9
Natural resources and mining	.5	9.8	-2.6	545	4.4
Construction	8.4	131.7	5.9	779	2.1
Manufacturing	3.3	128.0	-2.5	1,050	8.2
Trade, transportation, and utilities	18.6	336.4	1.5	712	3.2
Information	1.6	36.6	-4.1	872	.5
Financial activities	9.5	133.3	1.5	933	3.7
Professional and business services	18.1	261.5	4.2	776	3.5
Education and health services	7.6	160.5	5.6	842	5.0
Leisure and hospitality	5.6	155.8	.8	364	2.8
Other services	5.7	44.7	-2.6	500	2.2
Government	.5	219.4	1.6	766	3.7

See footnotes at end of table.

22. Continued—Quarterly Census of Employment and Wages: 10 largest counties, fourth quarter 2003.

County by NAICS supersector	Establishments, fourth quarter 2003 (thousands)	Employment		Average weekly wage[1]	
		December 2003 (thousands)	Percent change, December 2002-03[2]	Fourth quarter 2003	Percent change, fourth quarter 2002-03[2]
Dallas, TX	68.6	1,450.8	-1.4	$952	4.3
Private industry	68.2	1,294.6	-1.4	970	4.8
Natural resources and mining	.5	6.8	-20.5	2,680	22.7
Construction	4.5	73.0	-2.2	909	5.5
Manufacturing	3.5	144.9	-3.1	1,075	6.8
Trade, transportation, and utilities	15.8	326.1	-3.3	898	5.2
Information	1.9	64.0	-5.1	1,272	8.7
Financial activities	8.6	140.0	1.2	1,215	2.9
Professional and business services	14.0	237.7	.0	1,152	4.2
Education and health services	6.3	131.4	2.4	887	2.7
Leisure and hospitality	5.2	127.5	.0	432	4.3
Other services	6.7	40.5	-3.4	587	2.8
Government	.4	156.2	-1.8	800	-.1
Orange, CA	88.8	1,436.6	1.3	874	5.3
Private industry	87.4	1,305.5	2.1	875	5.2
Natural resources and mining	.3	6.1	8.3	579	.2
Construction	6.4	85.5	4.4	969	5.9
Manufacturing	6.1	179.9	-3.0	1,036	11.4
Trade, transportation, and utilities	17.3	278.8	.6	802	2.7
Information	1.5	33.8	-4.4	1,152	5.3
Financial activities	9.7	127.8	9.9	1,354	6.2
Professional and business services	17.4	261.0	1.0	942	2.8
Education and health services	9.1	126.6	6.1	849	3.7
Leisure and hospitality	6.6	159.9	2.5	358	3.8
Other services	12.9	46.0	6.3	518	3.0
Government	1.4	131.1	-5.7	859	6.0
San Diego, CA	85.3	1,278.2	1.3	815	2.6
Private industry	83.9	1,060.2	1.5	809	2.5
Natural resources and mining	.9	11.0	-5.4	491	1.0
Construction	6.4	81.1	4.7	869	.7
Manufacturing	3.6	105.4	-4.2	1,129	11.5
Trade, transportation, and utilities	14.2	220.4	2.2	655	.9
Information	1.4	36.7	-4.5	1,582	-2.0
Financial activities	8.8	81.6	4.8	1,058	.4
Professional and business services	14.9	208.1	1.5	989	2.8
Education and health services	7.6	122.6	1.6	778	5.7
Leisure and hospitality	6.5	141.5	3.5	346	2.4
Other services	19.5	51.6	1.8	449	2.7
Government	1.3	218.0	.1	843	2.9
King, WA	81.6	1,100.6	.2	935	.2
Private industry	81.0	945.5	.1	944	-.3
Natural resources and mining	.4	2.8	-11.3	1,109	.8
Construction	6.2	53.4	-.4	921	1.4
Manufacturing	2.7	101.9	-8.2	1,176	-2.1
Trade, transportation, and utilities	14.8	225.5	1.1	804	2.6
Information	1.5	69.2	.8	1,829	-15.7
Financial activities	6.1	77.5	2.4	1,114	3.5
Professional and business services	11.7	158.3	.7	1,160	8.4
Education and health services	5.9	108.3	1.5	746	4.8
Leisure and hospitality	5.4	100.5	2.9	390	3.7
Other services	26.4	48.1	1.2	463	.4
Government	.6	155.1	1.0	882	3.6
Miami-Dade, FL	80.2	980.8	-.5	765	3.5
Private industry	79.9	827.5	-.7	742	3.6
Natural resources and mining	.5	9.9	-1.8	421	4.0
Construction	4.9	40.7	.3	788	2.7
Manufacturing	2.8	49.4	-9.8	695	5.8
Trade, transportation, and utilities	23.2	247.2	-1.7	689	4.2
Information	1.7	28.5	-3.2	990	1.7
Financial activities	8.2	65.5	.7	1,062	-1.1
Professional and business services	15.9	132.0	-.2	948	5.2
Education and health services	7.8	123.4	1.4	748	2.3
Leisure and hospitality	5.3	92.8	2.1	432	9.9
Other services	7.5	34.5	-1.8	450	3.0
Government	.3	153.3	.5	886	2.8

[1] Average weekly wages were calculated using unrounded data.

[2] Percent changes were computed from quarterly employment and pay data adjusted for noneconomic county reclassifications. See Notes on Current Labor Statistics.

[3] Totals for the United States do not include data for Puerto Rico or the Virgin Islands.

[4] Data do not meet BLS or State agency disclosure standards.

NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. Data are preliminary.

23. Quarterly Census of Employment and Wages: by State, fourth quarter 2003.

State	Establishments, fourth quarter 2003 (thousands)	Employment		Average weekly wage[1]	
		December 2003 (thousands)	Percent change, December 2002-03	Fourth quarter 2003	Percent change, fourth quarter 2002-03
United States[2]	8,314.1	129,341.5	0.0	$767	3.6
Alabama	111.8	1,838.1	-.1	657	4.0
Alaska	20.0	282.7	1.1	746	1.1
Arizona	126.9	2,352.1	2.2	710	3.8
Arkansas	75.2	1,133.6	.5	587	4.1
California	1,190.8	14,922.3	.0	869	3.8
Colorado	160.0	2,134.6	-1.1	784	2.0
Connecticut	109.1	1,648.9	-.7	992	3.8
Delaware	27.1	408.4	.5	825	5.0
District of Columbia	30.0	654.8	-.4	1,238	3.9
Florida	504.1	7,424.5	.8	685	3.8
Georgia	245.6	3,845.6	.2	734	2.8
Hawaii	37.4	583.0	1.3	678	3.7
Idaho	48.5	577.5	.6	579	1.8
Illinois	325.7	5,738.7	-1.2	827	3.2
Indiana	152.1	2,852.2	-.3	675	3.5
Iowa	90.6	1,418.5	.0	626	4.7
Kansas	82.2	1,298.3	-.9	631	2.8
Kentucky	105.7	1,740.6	.3	645	3.5
Louisiana	114.0	1,870.9	.5	628	2.4
Maine	47.4	595.8	.7	631	4.6
Maryland	150.4	2,466.4	.7	831	3.6
Massachusetts	206.6	3,154.6	-1.9	954	5.2
Michigan	251.3	4,365.8	-1.1	806	3.9
Minnesota	159.0	2,591.9	-.5	777	3.2
Mississippi	65.6	1,108.1	.4	559	3.7
Missouri	165.4	2,633.6	-.7	676	2.4
Montana	42.0	396.6	1.1	549	4.0
Nebraska	55.3	884.4	.6	613	3.2
Nevada	60.3	1,111.2	4.4	721	5.1
New Hampshire	47.0	614.9	.6	788	4.0
New Jersey	268.1	3,912.8	.1	945	3.4
New Mexico	50.4	757.1	1.4	612	4.1
New York	550.3	8,379.2	-.4	959	5.2
North Carolina	227.8	3,759.6	-.1	679	4.5
North Dakota	24.0	317.6	.9	563	4.3
Ohio	294.2	5,322.4	-.7	713	3.8
Oklahoma	91.6	1,423.4	-1.3	597	4.2
Oregon	118.8	1,579.8	.2	694	3.3
Pennsylvania	326.9	5,524.5	-.2	750	4.7
Rhode Island	34.7	480.5	1.2	738	5.1
South Carolina	108.4	1,781.0	.3	623	3.1
South Dakota	28.1	365.4	.3	559	4.1
Tennessee	128.4	2,648.0	.4	689	4.2
Texas	505.3	9,300.1	-.3	754	3.1
Utah	73.9	1,066.2	1.2	630	2.3
Vermont	24.1	300.7	.3	661	5.1
Virginia	202.6	3,477.5	1.2	786	5.2
Washington	222.7	2,654.7	1.0	759	1.3
West Virginia	47.2	685.2	.1	587	2.1
Wisconsin	157.6	2,715.4	.0	683	4.1
Wyoming	22.0	241.6	1.7	616	4.1
Puerto Rico	50.2	1,074.1	3.5	450	4.7
Virgin Islands	3.2	42.5	-.2	629	2.4

[1] Average weekly wages were calculated using unrounded data.

[2] Totals for the United States do not include data for Puerto Rico or the Virgin Islands.

NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. Data are preliminary.

24. Annual data: Quarterly Census of Employment and Wages, by ownership

Year	Average establishments	Average annual employment	Total annual wages (in thousands)	Average annual wage per employee	Average weekly wage
	Total covered (UI and UCFE)				
1993	6,679,934	109,422,571	$2,884,472,282	$26,361	$507
1994	6,826,677	112,611,287	3,033,676,678	26,939	518
1995	7,040,677	115,487,841	3,215,921,236	27,846	536
1996	7,189,168	117,963,132	3,414,514,808	28,946	557
1997	7,369,473	121,044,432	3,674,031,718	30,353	584
1998	7,634,018	124,183,549	3,967,072,423	31,945	614
1999	7,820,860	127,042,282	4,235,579,204	33,340	641
2000	7,879,116	129,877,063	4,587,708,584	35,323	679
2001	7,984,529	129,635,800	4,695,225,123	36,219	697
2002	8,101,872	128,233,919	4,714,374,741	36,764	707
	UI covered				
1993	6,632,221	106,351,431	$2,771,023,411	$26,055	$501
1994	6,778,300	109,588,189	2,918,684,128	26,633	512
1995	6,990,594	112,539,795	3,102,353,355	27,567	530
1996	7,137,644	115,081,246	3,298,045,286	28,658	551
1997	7,317,363	118,233,942	3,553,933,885	30,058	578
1998	7,586,767	121,400,660	3,845,494,089	31,676	609
1999	7,771,198	124,255,714	4,112,169,533	33,094	636
2000	7,828,861	127,005,574	4,454,966,824	35,077	675
2001	7,933,536	126,883,182	4,560,511,280	35,943	691
2002	8,051,117	125,475,293	4,570,787,218	36,428	701
	Private industry covered				
1993	6,454,381	91,202,971	$2,365,301,493	$25,934	$499
1994	6,596,158	94,146,344	2,494,458,555	26,496	510
1995	6,803,454	96,894,844	2,658,927,216	27,441	528
1996	6,946,858	99,268,446	2,837,334,217	28,582	550
1997	7,121,182	102,175,161	3,071,807,287	30,064	578
1998	7,381,518	105,082,368	3,337,621,699	31,762	611
1999	7,560,567	107,619,457	3,577,738,557	33,244	639
2000	7,622,274	110,015,333	3,887,626,769	35,337	680
2001	7,724,965	109,304,802	3,952,152,155	36,157	695
2002	7,839,903	107,577,281	3,930,767,025	36,539	703
	State government covered				
1993	59,185	4,088,075	$117,095,062	$28,643	$551
1994	60,686	4,162,944	122,879,977	29,518	568
1995	60,763	4,201,836	128,143,491	30,497	586
1996	62,146	4,191,726	131,605,800	31,397	604
1997	65,352	4,214,451	137,057,432	32,521	625
1998	67,347	4,240,779	142,512,445	33,605	646
1999	70,538	4,296,673	149,011,194	34,681	667
2000	65,096	4,370,160	158,618,365	36,296	698
2001	64,583	4,452,237	168,358,331	37,814	727
2002	64,447	4,485,071	175,866,492	39,212	754
	Local government covered				
1993	118,626	11,059,500	$288,594,697	$26,095	$502
1994	121,425	11,278,080	301,315,857	26,717	514
1995	126,342	11,442,238	315,252,346	27,552	530
1996	128,640	11,621,074	329,105,269	28,320	545
1997	130,829	11,844,330	345,069,166	29,134	560
1998	137,902	12,077,513	365,359,945	30,251	582
1999	140,093	12,339,584	385,419,781	31,234	601
2000	141,491	12,620,081	408,721,690	32,387	623
2001	143,989	13,126,143	440,000,795	33,521	645
2002	146,767	13,412,941	464,153,701	34,605	665
	Federal Government covered (UCFE)				
1993	47,714	3,071,140	$113,448,871	$36,940	$710
1994	48,377	3,023,098	114,992,550	38,038	731
1995	50,083	2,948,046	113,567,881	38,523	741
1996	51,524	2,881,887	116,469,523	40,414	777
1997	52,110	2,810,489	120,097,833	42,732	822
1998	47,252	2,782,888	121,578,334	43,688	840
1999	49,661	2,786,567	123,409,672	44,287	852
2000	50,256	2,871,489	132,741,760	46,228	889
2001	50,993	2,752,619	134,713,843	48,940	941
2002	50,755	2,758,627	143,587,523	52,050	1,001

NOTE: Detail may not add to totals due to rounding. Data reflect the movement of Indian Tribal Council establishments from private industry to the public sector. See Notes on Current Labor Statistics.

25. Annual data: Quarterly Census of Employment and Wages, establishment size and employment, private ownership, by supersector, first quarter 2003

Industry, establishments, and employment	Total	Size of establishments								
		Fewer than 5 workers[1]	5 to 9 workers	10 to 19 workers	20 to 49 workers	50 to 99 workers	100 to 249 workers	250 to 499 workers	500 to 999 workers	1,000 or more workers
Total all industries[2]										
Establishments, first quarter	7,933,974	4,768,812	1,331,834	872,241	597,662	203,030	115,598	28,856	10,454	5,487
Employment, March	105,583,548	7,095,128	8,810,097	11,763,253	18,025,655	13,970,194	17,299,058	9,864,934	7,090,739	11,664,490
Natural resources and mining										
Establishments, first quarter	124,527	72,088	23,248	14,773	9,226	2,893	1,593	501	161	44
Employment, March	1,526,176	110,155	153,629	198,895	275,811	198,122	241,559	171,063	108,563	68,379
Construction										
Establishments, first quarter	795,029	523,747	129,201	76,215	46,096	12,837	5,604	1,006	262	61
Employment, March	6,285,841	746,296	846,521	1,021,722	1,371,071	872,274	823,846	338,107	172,944	93,060
Manufacturing										
Establishments, first quarter	381,159	148,469	65,027	57,354	54,261	25,927	19,813	6,506	2,565	1,237
Employment, March	14,606,928	252,443	436,028	788,581	1,685,563	1,815,385	3,043,444	2,245,183	1,732,368	2,607,933
Trade, transportation, and utilities										
Establishments, first quarter	1,851,662	992,180	378,157	239,637	149,960	51,507	31,351	6,681	1,619	570
Employment, March	24,683,356	1,646,304	2,514,548	3,204,840	4,527,709	3,564,316	4,661,898	2,277,121	1,070,141	1,216,479
Information										
Establishments, first quarter	147,062	84,906	20,744	16,130	13,539	5,920	3,773	1,223	575	252
Employment, March	3,208,667	112,409	138,076	220,618	416,670	410,513	576,674	418,113	399,366	516,228
Financial activities										
Establishments, first quarter	753,064	480,485	135,759	76,733	39,003	11,743	6,195	1,794	883	469
Employment, March	7,753,717	788,607	892,451	1,017,662	1,162,498	801,140	934,618	620,183	601,549	935,009
Professional and business services										
Establishments, first quarter	1,307,697	887,875	180,458	111,532	73,599	28,471	17,856	5,153	1,919	834
Employment, March	15,648,435	1,230,208	1,184,745	1,501,470	2,232,506	1,969,466	2,707,203	1,762,251	1,307,870	1,752,716
Education and health services										
Establishments, first quarter	720,207	338,139	164,622	103,683	65,173	24,086	17,122	3,929	1,761	1,692
Employment, March	15,680,834	629,968	1,092,329	1,392,099	1,955,861	1,679,708	2,558,300	1,337,188	1,220,921	3,814,460
Leisure and hospitality										
Establishments, first quarter	657,359	260,149	110,499	118,140	122,168	34,166	9,718	1,609	599	311
Employment, March	11,731,379	411,192	744,144	1,653,470	3,683,448	2,285,550	1,372,780	545,304	404,831	630,660
Other services										
Establishments, first quarter	1,057,236	851,231	116,940	56,238	24,235	5,451	2,561	454	109	17
Employment, March	4,243,633	1,037,360	761,518	740,752	703,957	371,774	376,832	150,421	71,453	29,566

[1] Includes establishments that reported no workers in March 2003.

[2] Includes data for unclassified establishments, not shown separately.

NOTE: Details may not add to totals due to rounding. Data are only produced for first quarter. Data are preliminary.

26. Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Metropolitan areas[3]	$37,908	$38,423	1.4
Abilene, TX	25,141	25,517	1.5
Akron, OH	32,930	34,037	3.4
Albany, GA	28,877	29,913	3.6
Albany-Schenectady-Troy, NY	35,355	35,994	1.8
Albuquerque, NM	31,667	32,475	2.6
Alexandria, LA	26,296	27,300	3.8
Allentown-Bethlehem-Easton, PA	33,569	34,789	3.6
Altoona, PA	26,869	27,360	1.8
Amarillo, TX	27,422	28,274	3.1
Anchorage, AK	37,998	39,112	2.9
Ann Arbor, MI	37,582	39,220	4.4
Anniston, AL	26,486	27,547	4.0
Appleton-Oshkosh-Neenah, WI	32,652	33,020	1.1
Asheville, NC	28,511	28,771	.9
Athens, GA	28,966	29,942	3.4
Atlanta, GA	40,559	41,123	1.4
Atlantic-Cape May, NJ	31,268	32,201	3.0
Auburn-Opelika, AL	25,753	26,405	2.5
Augusta-Aiken, GA-SC	30,626	31,743	3.6
Austin-San Marcos, TX	40,831	39,540	-3.2
Bakersfield, CA	30,106	31,192	3.6
Baltimore, MD	37,495	38,718	3.3
Bangor, ME	27,850	28,446	2.1
Barnstable-Yarmouth, MA	31,025	32,028	3.2
Baton Rouge, LA	30,321	31,366	3.4
Beaumont-Port Arthur, TX	31,798	32,577	2.4
Bellingham, WA	27,724	28,284	2.0
Benton Harbor, MI	31,140	32,627	4.8
Bergen-Passaic, NJ	44,701	45,185	1.1
Billings, MT	27,889	28,553	2.4
Biloxi-Gulfport-Pascagoula, MS	28,351	28,515	.6
Binghamton, NY	31,187	31,832	2.1
Birmingham, AL	34,519	35,940	4.1
Bismarck, ND	27,116	27,993	3.2
Bloomington, IN	28,013	28,855	3.0
Bloomington-Normal, IL	35,111	36,133	2.9
Boise City, ID	31,624	31,955	1.0
Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH	45,766	45,685	-.2
Boulder-Longmont, CO	44,310	44,037	-.6
Brazoria, TX	35,655	36,253	1.7
Bremerton, WA	31,525	33,775	7.1
Brownsville-Harlingen-San Benito, TX	22,142	22,892	3.4
Bryan-College Station, TX	25,755	26,051	1.1
Buffalo-Niagara Falls, NY	32,054	32,777	2.3
Burlington, VT	34,363	35,169	2.3
Canton-Massillon, OH	29,020	29,689	2.3
Casper, WY	28,264	28,886	2.2
Cedar Rapids, IA	34,649	34,730	.2
Champaign-Urbana, IL	30,488	31,995	4.9
Charleston-North Charleston, SC	28,887	29,993	3.8
Charleston, WV	31,530	32,136	1.9
Charlotte-Gastonia-Rock Hill, NC-SC	37,267	38,413	3.1
Charlottesville, VA	32,427	33,328	2.8
Chattanooga, TN-GA	29,981	30,631	2.2
Cheyenne, WY	27,579	28,827	4.5
Chicago, IL	42,685	43,239	1.3
Chico-Paradise, CA	26,499	27,190	2.6
Cincinnati, OH-KY-IN	36,050	37,168	3.1
Clarksville-Hopkinsville, TN-KY	25,567	26,940	5.4
Cleveland-Lorain-Elyria, OH	35,514	36,102	1.7
Colorado Springs, CO	34,391	34,681	.8
Columbia, MO	28,490	29,135	2.3
Columbia, SC	29,904	30,721	2.7
Columbus, GA-AL	28,412	29,207	2.8
Columbus, OH	35,028	36,144	3.2
Corpus Christi, TX	29,361	30,168	2.7
Corvallis, OR	35,525	36,766	3.5
Cumberland, MD-WV	25,504	26,704	4.7
Dallas, TX	42,706	43,000	.7
Danville, VA	25,465	26,116	2.6

See footnotes at end of table.

26. Continued—Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Davenport-Moline-Rock Island, IA-IL	$31,275	$32,118	2.7
Dayton-Springfield, OH	33,619	34,327	2.1
Daytona Beach, FL	25,953	26,898	3.6
Decatur, AL	30,891	30,370	-1.7
Decatur, IL	33,354	33,215	-.4
Denver, CO	42,351	42,133	-.5
Des Moines, IA	34,303	35,641	3.9
Detroit, MI	42,704	43,224	1.2
Dothan, AL	28,026	29,270	4.4
Dover, DE	27,754	29,818	7.4
Dubuque, IA	28,402	29,208	2.8
Duluth-Superior, MN-WI	29,415	30,581	4.0
Dutchess County, NY	38,748	38,221	-1.4
Eau Claire, WI	27,680	28,760	3.9
El Paso, TX	25,847	26,604	2.9
Elkhart-Goshen, IN	30,797	32,427	5.3
Elmira, NY	28,669	29,151	1.7
Enid, OK	24,836	25,507	2.7
Erie, PA	29,293	29,780	1.7
Eugene-Springfield, OR	28,983	29,427	1.5
Evansville-Henderson, IN-KY	31,042	31,977	3.0
Fargo-Moorhead, ND-MN	27,899	29,053	4.1
Fayetteville, NC	26,981	28,298	4.9
Fayetteville-Springdale-Rogers, AR	29,940	31,090	3.8
Flagstaff, AZ-UT	25,890	26,846	3.7
Flint, MI	35,995	36,507	1.4
Florence, AL	25,639	26,591	3.7
Florence, SC	28,800	29,563	2.6
Fort Collins-Loveland, CO	33,248	34,215	2.9
Fort Lauderdale, FL	33,966	34,475	1.5
Fort Myers-Cape Coral, FL	29,432	30,324	3.0
Fort Pierce-Port St. Lucie, FL	27,742	29,152	5.1
Fort Smith, AR-OK	26,755	27,075	1.2
Fort Walton Beach, FL	26,151	27,242	4.2
Fort Wayne, IN	31,400	32,053	2.1
Fort Worth-Arlington, TX	36,379	37,195	2.2
Fresno, CA	27,647	28,814	4.2
Gadsden, AL	25,760	26,214	1.8
Gainesville, FL	26,917	27,648	2.7
Galveston-Texas City, TX	31,067	31,920	2.7
Gary, IN	31,948	32,432	1.5
Glens Falls, NY	27,885	28,931	3.8
Goldsboro, NC	25,398	25,821	1.7
Grand Forks, ND-MN	24,959	25,710	3.0
Grand Junction, CO	27,426	28,331	3.3
Grand Rapids-Muskegon-Holland, MI	33,431	34,214	2.3
Great Falls, MT	24,211	25,035	3.4
Greeley, CO	30,066	31,104	3.5
Green Bay, WI	32,631	33,698	3.3
Greensboro—Winston-Salem—High Point, NC	31,730	32,369	2.0
Greenville, NC	28,289	29,055	2.7
Greenville-Spartanburg-Anderson, SC	30,940	31,726	2.5
Hagerstown, MD	29,020	30,034	3.5
Hamilton-Middletown, OH	32,325	32,985	2.0
Harrisburg-Lebanon-Carlisle, PA	33,408	34,497	3.3
Hartford, CT	43,880	44,387	1.2
Hattiesburg, MS	25,145	26,051	3.6
Hickory-Morganton-Lenoir, NC	27,305	27,996	2.5
Honolulu, HI	32,531	33,978	4.4
Houma, LA	30,343	30,758	1.4
Houston, TX	42,784	42,712	-.2
Huntington-Ashland, WV-KY-OH	27,478	28,321	3.1
Huntsville, AL	36,727	38,571	5.0
Indianapolis, IN	35,989	36,608	1.7
Iowa City, IA	31,663	32,567	2.9
Jackson, MI	32,454	33,251	2.5
Jackson, MS	29,813	30,537	2.4
Jackson, TN	29,414	30,443	3.5
Jacksonville, FL	32,367	33,722	4.2
Jacksonville, NC	21,395	22,269	4.1

See footnotes at end of table.

26. Continued—Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Jamestown, NY	$25,913	$26,430	2.0
Janesville-Beloit, WI	31,482	32,837	4.3
Jersey City, NJ	47,638	49,562	4.0
Johnson City-Kingsport-Bristol, TN-VA	28,543	29,076	1.9
Johnstown, PA	25,569	26,161	2.3
Jonesboro, AR	25,337	26,165	3.3
Joplin, MO	26,011	26,594	2.2
Kalamazoo-Battle Creek, MI	32,905	34,237	4.0
Kankakee, IL	29,104	30,015	3.1
Kansas City, MO-KS	35,794	36,731	2.6
Kenosha, WI	31,562	32,473	2.9
Killeen-Temple, TX	26,193	27,299	4.2
Knoxville, TN	30,422	31,338	3.0
Kokomo, IN	39,599	40,778	3.0
La Crosse, WI-MN	27,774	28,719	3.4
Lafayette, LA	29,693	30,104	1.4
Lafayette, IN	31,484	31,700	.7
Lake Charles, LA	29,782	30,346	1.9
Lakeland-Winter Haven, FL	28,890	29,505	2.1
Lancaster, PA	31,493	32,197	2.2
Lansing-East Lansing, MI	34,724	35,785	3.1
Laredo, TX	24,128	24,739	2.5
Las Cruces, NM	24,310	25,256	3.9
Las Vegas, NV-AZ	32,239	33,280	3.2
Lawrence, KS	25,923	26,621	2.7
Lawton, OK	24,812	25,392	2.3
Lewiston-Auburn, ME	27,092	28,435	5.0
Lexington, KY	31,593	32,776	3.7
Lima, OH	29,644	30,379	2.5
Lincoln, NE	29,352	30,614	4.3
Little Rock-North Little Rock, AR	30,858	31,634	2.5
Longview-Marshall, TX	28,029	28,172	.5
Los Angeles-Long Beach, CA	40,891	41,709	2.0
Louisville, KY-IN	33,058	33,901	2.6
Lubbock, TX	26,577	27,625	3.9
Lynchburg, VA	28,859	29,444	2.0
Macon, GA	30,595	31,884	4.2
Madison, WI	34,097	35,410	3.9
Mansfield, OH	28,808	30,104	4.5
McAllen-Edinburg-Mission, TX	22,313	23,179	3.9
Medford-Ashland, OR	27,224	28,098	3.2
Melbourne-Titusville-Palm Bay, FL	32,798	33,913	3.4
Memphis, TN-AR-MS	34,603	35,922	3.8
Merced, CA	25,479	26,771	5.1
Miami, FL	34,524	35,694	3.4
Middlesex-Somerset-Hunterdon, NJ	49,950	50,457	1.0
Milwaukee-Waukesha, WI	35,617	36,523	2.5
Minneapolis-St. Paul, MN-WI	40,868	41,722	2.1
Missoula, MT	26,181	27,249	4.1
Mobile, AL	28,129	28,742	2.2
Modesto, CA	29,591	30,769	4.0
Monmouth-Ocean, NJ	37,056	37,710	1.8
Monroe, LA	26,578	27,614	3.9
Montgomery, AL	29,150	30,525	4.7
Muncie, IN	28,374	29,017	2.3
Myrtle Beach, SC	24,029	24,672	2.7
Naples, FL	30,839	31,507	2.2
Nashville, TN	33,989	35,036	3.1
Nassau-Suffolk, NY	39,662	40,396	1.9
New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT	52,198	51,170	-2.0
New London-Norwich, CT	38,505	38,650	.4
New Orleans, LA	31,089	32,407	4.2
New York, NY	59,097	57,708	-2.4
Newark, NJ	47,715	48,781	2.2
Newburgh, NY-PA	29,827	30,920	3.7
Norfolk-Virginia Beach-Newport News, VA-NC	29,875	30,823	3.2
Oakland, CA	45,920	46,877	2.1
Ocala, FL	26,012	26,628	2.4
Odessa-Midland, TX	31,278	31,295	.1
Oklahoma City, OK	28,915	29,850	3.2

See footnotes at end of table.

26. Continued—Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Olympia, WA	$32,772	$33,765	3.0
Omaha, NE-IA	31,856	33,107	3.9
Orange County, CA	40,252	41,219	2.4
Orlando, FL	31,276	32,461	3.8
Owensboro, KY	27,306	28,196	3.3
Panama City, FL	26,433	27,448	3.8
Parkersburg-Marietta, WV-OH	27,920	29,529	5.8
Pensacola, FL	28,059	28,189	.5
Peoria-Pekin, IL	33,293	34,261	2.9
Philadelphia, PA-NJ	40,231	41,121	2.2
Phoenix-Mesa, AZ	35,514	36,045	1.5
Pine Bluff, AR	27,561	28,698	4.1
Pittsburgh, PA	35,024	35,625	1.7
Pittsfield, MA	31,561	32,707	3.6
Pocatello, ID	24,621	25,219	2.4
Portland, ME	32,327	33,309	3.0
Portland-Vancouver, OR-WA	37,285	37,650	1.0
Providence-Warwick-Pawtucket, RI	33,403	34,610	3.6
Provo-Orem, UT	28,266	28,416	.5
Pueblo, CO	27,097	27,763	2.5
Punta Gorda, FL	25,404	26,119	2.8
Racine, WI	33,319	34,368	3.1
Raleigh-Durham-Chapel Hill, NC	38,691	39,056	.9
Rapid City, SD	25,508	26,434	3.6
Reading, PA	32,807	33,912	3.4
Redding, CA	28,129	28,961	3.0
Reno, NV	34,231	34,744	1.5
Richland-Kennewick-Pasco, WA	33,370	35,174	5.4
Richmond-Petersburg, VA	35,879	36,751	2.4
Riverside-San Bernardino, CA	30,510	31,591	3.5
Roanoke, VA	30,330	31,775	4.8
Rochester, MN	37,753	39,036	3.4
Rochester, NY	34,327	34,827	1.5
Rockford, IL	32,104	32,827	2.3
Rocky Mount, NC	28,770	28,893	.4
Sacramento, CA	38,016	39,354	3.5
Saginaw-Bay City-Midland, MI	35,429	35,444	.0
St. Cloud, MN	28,263	29,535	4.5
St. Joseph, MO	27,734	28,507	2.8
St. Louis, MO-IL	35,928	36,712	2.2
Salem, OR	28,336	29,210	3.1
Salinas, CA	31,735	32,463	2.3
Salt Lake City-Ogden, UT	31,965	32,600	2.0
San Angelo, TX	26,147	26,321	.7
San Antonio, TX	30,650	31,336	2.2
San Diego, CA	38,418	39,305	2.3
San Francisco, CA	59,654	56,602	-5.1
San Jose, CA	65,931	63,056	-4.4
San Luis Obispo-Atascadero-Paso Robles, CA	29,092	29,981	3.1
Santa Barbara-Santa Maria-Lompoc, CA	33,626	34,382	2.2
Santa Cruz-Watsonville, CA	35,022	35,721	2.0
Santa Fe, NM	30,671	32,269	5.2
Santa Rosa, CA	36,145	36,494	1.0
Sarasota-Bradenton, FL	27,958	28,950	3.5
Savannah, GA	30,176	30,796	2.1
Scranton–Wilkes-Barre–Hazleton, PA	28,642	29,336	2.4
Seattle-Bellevue-Everett, WA	45,299	46,093	1.8
Sharon, PA	26,707	27,872	4.4
Sheboygan, WI	30,840	32,148	4.2
Sherman-Denison, TX	30,397	30,085	-1.0
Shreveport-Bossier City, LA	27,856	28,769	3.3
Sioux City, IA-NE	26,755	27,543	2.9
Sioux Falls, SD	28,962	29,975	3.5
South Bend, IN	30,769	31,821	3.4
Spokane, WA	29,310	30,037	2.5
Springfield, IL	36,061	37,336	3.5
Springfield, MO	27,338	27,987	2.4
Springfield, MA	32,801	33,972	3.6
State College, PA	29,939	30,910	3.2
Steubenville-Weirton, OH-WV	28,483	29,129	2.3

See footnotes at end of table.

26. Continued—Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Stockton-Lodi, CA	$30,818	$31,958	3.7
Sumter, SC	24,450	24,982	2.2
Syracuse, NY	32,254	33,752	4.6
Tacoma, WA	31,261	32,507	4.0
Tallahassee, FL	29,708	30,895	4.0
Tampa-St. Petersburg-Clearwater, FL	31,678	32,458	2.5
Terre Haute, IN	27,334	28,415	4.0
Texarkana, TX-Texarkana, AR	26,492	27,717	4.6
Toledo, OH	32,299	33,513	3.8
Topeka, KS	30,513	31,707	3.9
Trenton, NJ	46,831	47,969	2.4
Tucson, AZ	30,690	31,673	3.2
Tulsa, OK	31,904	32,241	1.1
Tuscaloosa, AL	29,972	30,745	2.6
Tyler, TX	30,551	31,050	1.6
Utica-Rome, NY	27,777	28,500	2.6
Vallejo-Fairfield-Napa, CA	33,903	34,543	1.9
Ventura, CA	37,783	38,195	1.1
Victoria, TX	29,068	29,168	.3
Vineland-Millville-Bridgeton, NJ	32,571	33,625	3.2
Visalia-Tulare-Porterville, CA	24,732	25,650	3.7
Waco, TX	28,245	28,885	2.3
Washington, DC-MD-VA-WV	47,589	48,430	1.8
Waterloo-Cedar Falls, IA	29,119	29,916	2.7
Wausau, WI	29,402	30,292	3.0
West Palm Beach-Boca Raton, FL	35,957	36,550	1.6
Wheeling, WV-OH	26,282	26,693	1.6
Wichita, KS	32,983	33,429	1.4
Wichita Falls, TX	25,557	26,387	3.2
Williamsport, PA	27,801	27,988	.7
Wilmington-Newark, DE-MD	42,177	43,401	2.9
Wilmington, NC	29,287	29,157	-.4
Yakima, WA	24,204	24,934	3.0
Yolo, CA	35,352	35,591	.7
York, PA	31,936	32,609	2.1
Youngstown-Warren, OH	28,789	29,799	3.5
Yuba City, CA	27,781	28,967	4.3
Yuma, AZ	22,415	23,429	4.5
Aguadilla, PR	18,061	19,283	6.8
Arecibo, PR	16,600	18,063	8.8
Caguas, PR	18,655	19,706	5.6
Mayaguez, PR	17,101	17,500	2.3
Ponce, PR	17,397	18,187	4.5
San Juan-Bayamon, PR	20,948	21,930	4.7

[1] Includes data for Metropolitan Statistical Areas (MSA) and Primary Metropolitan Statistical Areas (PMSA) as defined by OMB Bulletin No. 99-04. In the New England areas, the New England County Metropolitan Area (NECMA) definitions were used.

[2] Each year's total is based on the MSA definition for the specific year. Annual changes include differences resulting from changes in MSA definitions.

[3] Totals do not include the six MSAs within Puerto Rico.

NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs.

27. Annual data: Employment status of the population

[Numbers in thousands]

Employment status	1993	1994[1]	1995	1996	1997[1]	1998[1]	1999[1]	2000[1]	2001	2002	2003
Civilian noninstitutional population	194,838	196,814	198,584	200,591	203,133	205,220	207,753	212,577	215,092	217,570	221,168
Civilian labor force	129,200	131,056	132,304	133,943	136,297	137,673	139,368	142,583	143,734	144,863	146,510
Labor force participation rate	66.3	66.6	66.6	66.8	67.1	67.1	67.1	67.1	66.8	66.6	66.2
Employed	120,259	123,060	124,900	126,708	129,558	131,463	133,488	136,891	136,933	136,485	137,736
Employment-population ratio	61.7	62.5	62.9	63.2	63.8	64.1	64.3	64.4	63.7	62.7	62.3
Unemployed	8,940	7,996	7,404	7,236	6,739	6,210	5,880	5,692	6,801	8,378	8,774
Unemployment rate	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.7	5.8	6.0
Not in the labor force	65,638	65,758	66,280	66,647	66,836	67,547	68,385	69,994	71,359	72,707	74,658

[1] Not strictly comparable with prior years.

28. Annual data: Employment levels by industry

[In thousands]

Industry	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total private employment	91,855	95,016	97,866	100,169	103,113	106,021	108,686	110,996	110,707	108,828	108,356
Total nonfarm employment	110,844	114,291	117,298	119,708	122,770	125,930	128,993	131,785	131,826	130,341	129,931
Goods-producing	22,219	22,774	23,156	23,410	23,886	24,354	24,465	24,649	23,873	22,557	21,817
Natural resources and mining	666	659	641	637	654	645	598	599	606	583	571
Construction	4,779	5,095	5,274	5,536	5,813	6,149	6,545	6,787	6,826	6,716	6,722
Manufacturing	16,744	17,021	17,241	17,237	17,419	17,560	17,322	17,263	16,441	15,259	14,525
Private service-providing	69,636	72,242	74,710	76,759	79,227	81,667	84,221	86,346	86,834	86,271	86,538
Trade, transportation, and utilities	22,378	23,128	23,834	24,239	24,700	25,186	25,771	26,225	25,983	25,497	25,275
Wholesale trade	5,093.2	5,247.3	5,433.1	5,522.0	5,663.9	5,795.2	5,892.5	5,933.2	5,772.7	5,652.3	5,605.6
Retail trade	13,020.5	13,490.8	13,896.7	14,142.5	14,388.9	14,609.3	14,970.1	15,279.8	15,238.6	15,025.1	14,911.5
Transportation and warehousing	3,553.8	3,701.0	3,837.8	3,935.3	4,026.5	4,168.0	4,300.3	4,410.3	4,372.0	4,223.6	4,176.7
Utilities	710.7	689.3	666.2	639.6	620.9	613.4	608.5	601.3	599.4	596.2	580.8
Information	2,668	2,738	2,843	2,940	3,084	3,218	3,419	3,631	3,629	3,395	3,198
Financial activities	6,709	6,867	6,827	6,969	7,178	7,462	7,648	7,687	7,807	7,847	7,974
Professional and business services	11,495	12,174	12,844	13,462	14,335	15,147	15,957	16,666	16,476	15,976	15,997
Education and health services	12,303	12,807	13,289	13,683	14,087	14,446	14,798	15,109	15,645	16,199	16,577
Leisure and hospitality	9,732	10,100	10,501	10,777	11,018	11,232	11,543	11,862	12,036	11,986	12,125
Other services	4,350	4,428	4,572	4,690	4,825	4,976	5,087	5,168	5,258	5,372	5,393
Government	18,989	19,275	19,432	19,539	19,664	19,909	20,307	20,790	21,118	21,513	21,575

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

29. Annual data: Average hours and earnings of production or nonsupervisory workers on nonfarm payrolls, by industry

Industry	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Private sector:											
Average weekly hours	34.3	34.5	34.3	34.3	34.5	34.5	34.3	34.3	34.0	33.9	33.7
Average hourly earnings (in dollars)	11.03	11.32	11.64	12.03	12.49	13.00	13.47	14.00	14.53	14.95	15.35
Average weekly earnings (in dollars)	378.40	390.73	399.53	412.74	431.25	448.04	462.49	480.41	493.20	506.07	517.36
Goods-producing:											
Average weekly hours	40.6	41.1	40.8	40.8	41.1	40.8	40.8	40.7	39.9	39.9	39.8
Average hourly earnings (in dollars)	12.28	12.63	12.96	13.38	13.82	14.23	14.71	15.27	15.78	16.33	16.80
Average weekly earnings (in dollars)	498.82	519.58	528.62	546.48	568.43	580.99	599.99	621.86	630.04	651.61	669.23
Natural resources and mining											
Average weekly hours	44.9	45.3	45.3	46.0	46.2	44.9	44.2	44.4	44.6	43.2	43.6
Average hourly earnings (in dollars)	14.12	14.41	14.78	15.10	15.57	16.20	16.33	16.55	17.00	17.19	17.58
Average weekly earnings (in dollars)	634.77	653.14	670.32	695.07	720.11	727.28	721.74	734.92	757.92	741.97	766.83
Construction:											
Average weekly hours	38.4	38.8	38.8	38.9	38.9	38.8	39.0	39.2	38.7	38.4	38.4
Average hourly earnings (in dollars)	14.04	14.38	14.73	15.11	15.67	16.23	16.80	17.48	18.00	18.52	18.95
Average weekly earnings (in dollars)	539.81	558.53	571.57	588.48	609.48	629.75	655.11	685.78	695.89	711.82	727.11
Manufacturing:											
Average weekly hours	41.1	41.7	41.3	41.3	41.7	41.4	41.4	41.3	40.3	40.5	40.4
Average hourly earnings (in dollars)	11.70	12.04	12.34	12.75	13.14	13.45	13.85	14.32	14.76	15.29	15.74
Average weekly earnings (in dollars)	480.80	502.12	509.26	526.55	548.22	557.12	573.17	590.65	595.19	618.75	636.07
Private service-providing:											
Average weekly hours	32.5	32.7	32.6	32.6	32.8	32.8	32.7	32.7	32.5	32.5	32.4
Average hourly earnings (in dollars)	10.60	10.87	11.19	11.57	12.05	12.59	13.07	13.60	14.16	14.56	14.96
Average weekly earnings (in dollars)	345.03	354.97	364.14	376.72	394.77	412.78	427.30	445.00	460.32	472.88	484.00
Trade, transportation, and utilities:											
Average weekly hours	34.1	34.3	34.1	34.1	34.3	34.2	33.9	33.8	33.5	33.6	33.6
Average hourly earnings (in dollars)	10.55	10.80	11.10	11.46	11.90	12.39	12.82	13.31	13.70	14.02	14.34
Average weekly earnings (in dollars)	359.33	370.38	378.79	390.64	407.57	423.30	434.31	449.88	459.53	471.27	481.10
Wholesale trade:											
Average weekly hours	38.5	38.8	38.6	38.6	38.8	38.6	38.6	38.8	38.4	38.0	37.8
Average hourly earnings (in dollars)	12.57	12.93	13.34	13.80	14.41	15.07	15.62	16.28	16.77	16.98	17.36
Average weekly earnings (in dollars)	484.46	501.17	515.14	533.29	559.39	582.21	602.77	631.40	643.45	644.38	657.12
Retail trade:											
Average weekly hours	30.7	30.9	30.8	30.7	30.9	30.9	30.8	30.7	30.7	30.9	30.9
Average hourly earnings (in dollars)	8.36	8.61	8.85	9.21	9.59	10.05	10.45	10.86	11.29	11.67	11.90
Average weekly earnings (in dollars)	484.46	501.17	515.14	533.29	559.39	582.21	602.77	631.40	643.45	644.38	657.12
Transportation and warehousing:											
Average weekly hours	38.9	39.5	38.9	39.1	39.4	38.7	37.6	37.4	36.7	36.8	36.8
Average hourly earnings (in dollars)	12.71	12.84	13.18	13.45	13.78	14.12	14.55	15.05	15.33	15.76	16.25
Average weekly earnings (in dollars)	494.36	507.27	513.37	525.60	542.55	546.86	547.97	562.31	562.70	579.75	597.79
Utilities:											
Average weekly hours	42.1	42.3	42.3	42.0	42.0	42.0	42.0	42.0	41.4	40.9	41.1
Average hourly earnings (in dollars)	17.95	18.66	19.19	19.78	20.59	21.48	22.03	22.75	23.58	23.96	24.76
Average weekly earnings (in dollars)	756.35	789.98	811.52	830.74	865.26	902.94	924.59	955.66	977.18	979.09	1,016.94
Information:											
Average weekly hours	36.0	36.0	36.0	36.4	36.3	36.6	36.7	36.8	36.9	36.5	36.2
Average hourly earnings (in dollars)	14.86	15.32	15.68	16.30	17.14	17.67	18.40	19.07	19.80	20.20	21.01
Average weekly earnings (in dollars)	535.25	551.28	564.98	592.68	622.40	646.52	675.32	700.89	731.11	738.17	761.13
Financial activities:											
Average weekly hours	35.5	35.5	35.5	35.5	35.7	36.0	35.8	35.9	35.8	35.6	35.5
Average hourly earnings (in dollars)	11.36	11.82	12.28	12.71	13.22	13.93	14.47	14.98	15.59	16.17	17.13
Average weekly earnings (in dollars)	403.02	419.20	436.12	451.49	472.37	500.95	517.57	537.37	558.02	575.51	608.87
Professional and business services:											
Average weekly hours	34.0	34.1	34.0	34.1	34.3	34.3	34.4	34.5	34.2	34.2	34.1
Average hourly earnings (in dollars)	11.96	12.15	12.53	13.00	13.57	14.27	14.85	15.52	16.33	16.81	17.20
Average weekly earnings (in dollars)	406.20	414.16	426.44	442.81	465.51	490.00	510.99	535.07	557.84	574.66	586.68
Education and health services:											
Average weekly hours	32.0	32.0	32.0	31.9	32.2	32.2	32.1	32.2	32.3	32.4	32.3
Average hourly earnings (in dollars)	11.21	11.50	11.80	12.17	12.56	13.00	13.44	13.95	14.64	15.21	15.64
Average weekly earnings (in dollars)	359.08	368.14	377.73	388.27	404.65	418.82	431.35	449.29	473.39	492.74	505.76
Leisure and hospitality:											
Average weekly hours	25.9	26.0	25.9	25.9	26.0	26.2	26.1	26.1	25.8	25.8	25.6
Average hourly earnings (in dollars)	6.32	6.46	6.62	6.82	7.13	7.48	7.76	8.11	8.35	8.58	8.76
Average weekly earnings (in dollars)	163.45	168.00	171.43	176.48	185.81	195.82	202.87	211.79	215.19	221.26	224.25
Other services:											
Average weekly hours	32.6	32.7	32.6	32.5	32.7	32.6	32.5	32.5	32.3	32.0	31.4
Average hourly earnings (in dollars)	9.90	10.18	10.51	10.85	11.29	11.79	12.26	12.73	13.27	13.72	13.84
Average weekly earnings (in dollars)	322.69	332.44	342.36	352.62	368.63	384.25	398.77	413.41	428.64	439.76	434.49

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data.

30. Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Civilian workers[2]	159.9	161.3	162.2	164.5	165.8	167.6	168.4	170.7	172.2	0.9	3.9
Workers, by occupational group:											
White-collar workers	162.1	163.5	164.3	166.7	167.9	169.9	170.7	172.7	174.0	.8	3.6
Professional specialty and technical	159.3	161.4	162.4	164.1	165.0	167.0	168.0	170.2	171.2	.6	3.8
Executive, administrative, and managerial	165.6	166.3	166.7	171.1	172.0	174.0	174.9	175.8	177.1	.7	3.0
Administrative support, including clerical	163.3	164.9	166.1	168.3	170.0	171.7	172.5	175.3	177.2	1.1	4.2
Blue-collar workers	155.1	156.4	157.5	159.8	161.4	162.9	163.7	166.9	168.8	1.1	4.6
Service occupations	159.4	161.3	162.2	164.1	165.0	166.8	167.9	169.7	170.9	.7	3.6
Workers, by industry division:											
Goods-producing	157.7	158.7	169.2	163.1	164.6	165.8	166.8	170.4	171.9	.9	4.4
Manufacturing	158.1	159.1	160.5	164.0	165.4	166.5	167.1	171.7	173.2	.9	4.7
Service-producing	160.7	162.2	162.8	165.0	166.2	168.2	169.1	170.8	172.3	.9	3.7
Services	161.1	163.2	163.9	165.3	166.3	168.5	169.5	171.2	172.3	.6	3.6
Health services	161.8	163.1	164.5	166.4	167.6	169.3	170.7	173.0	174.4	.8	4.1
Hospitals	163.8	165.7	167.6	169.9	170.8	173.1	174.8	176.8	178.2	.8	4.3
Educational services	157.4	161.6	162.8	163.6	164.2	166.9	167.6	168.5	168.9	.2	2.9
Public administration[3]	157.5	160.2	161.7	163.4	164.3	167.3	168.1	170.1	171.4	.8	4.3
Nonmanufacturing	160.2	161.7	162.4	164.5	165.8	167.8	168.6	170.4	171.8	.8	3.6
Private industry workers	160.7	161.6	162.3	165.0	166.4	168.1	168.8	171.4	173.0	.9	4.0
Excluding sales occupations	160.5	161.6	162.4	165.1	166.6	168.1	169.0	171.6	173.2	.9	4.0
Workers, by occupational group:											
White-collar workers	163.8	164.6	165.2	168.1	169.4	171.2	172.0	174.2	175.7	.9	3.7
Excluding sales occupations	164.3	165.3	165.9	169.1	170.4	172.1	173.0	175.3	176.7	.8	3.7
Professional specialty and technical occupations	162.5	163.6	164.4	166.5	167.7	169.4	170.5	173.4	174.7	.7	4.2
Executive, administrative, and managerial occupations	166.6	167.0	167.2	172.1	173.1	175.0	175.9	176.8	178.1	.7	2.9
Sales occupations	161.6	161.6	161.9	163.5	165.1	167.2	167.1	169.2	171.2	1.2	3.7
Administrative support occupations, including clerical	164.2	165.6	166.7	169.0	170.9	172.3	173.2	176.1	178.1	1.1	4.2
Blue-collar workers	155.1	156.3	157.3	159.7	161.4	162.8	163.6	166.9	168.8	1.1	4.6
Precision production, craft, and repair occupations	155.7	156.9	157.8	160.0	162.0	163.1	164.2	167.1	169.1	1.2	4.4
Machine operators, assemblers, and inspectors	154.7	155.4	156.7	159.9	161.1	162.6	163.2	168.7	170.5	1.1	5.8
Transportation and material moving occupations	149.6	151.0	151.8	153.2	155.1	156.7	156.9	158.5	160.6	1.3	3.5
Handlers, equipment cleaners, helpers, and laborers	159.9	161.4	162.9	164.9	166.8	168.6	169.5	171.7	173.2	.9	3.8
Service occupations	157.4	159.0	159.8	161.7	162.6	163.8	164.3	166.9	168.2	.8	3.4
Production and nonsupervisory occupations[4]	158.7	159.7	160.5	162.6	164.1	165.7	166.6	169.3	171.0	1.0	4.2
Workers, by industry division:											
Goods-producing	157.6	158.6	160.1	163.0	164.5	165.7	166.5	170.3	171.8	.9	4.4
Excluding sales occupations	156.9	157.9	159.2	162.4	163.8	165.0	165.9	169.8	171.2	.8	4.5
White-collar occupations	161.9	162.9	164.3	167.8	169.2	170.1	170.5	173.5	174.7	.7	3.3
Excluding sales occupations	160.2	161.1	162.3	166.3	167.5	168.5	169.2	172.2	173.3	.6	3.5
Blue-collar occupations	154.8	155.9	157.3	159.9	161.5	162.9	163.9	168.1	169.8	1.0	5.1
Construction	155.2	156.3	157.9	159.1	161.1	162.3	163.3	164.6	165.9	.8	3.0
Manufacturing	158.1	159.1	160.5	164.0	165.4	166.5	167.1	171.7	173.2	.9	4.7
White-collar occupations	161.1	162.2	163.3	167.1	168.7	169.5	169.6	173.2	174.6	.8	3.5
Excluding sales occupations	158.6	159.6	160.7	165.1	166.4	167.4	167.8	171.3	172.6	.8	3.7
Blue-collar occupations	155.8	156.7	158.3	161.6	162.8	164.1	165.1	170.4	172.0	.9	5.7
Durables	158.3	158.9	160.6	164.4	165.5	166.6	167.3	172.4	174.0	.9	5.1
Nondurables	157.5	159.2	160.3	163.1	164.9	166.0	166.6	170.4	171.7	.8	4.1
Service-producing	161.8	162.7	163.1	165.6	167.0	168.8	169.7	171.6	173.3	1.0	3.8
Excluding sales occupations	162.4	163.5	164.0	166.6	168.0	169.7	170.6	172.5	174.2	1.0	3.7
White-collar occupations	164.0	164.7	165.1	167.9	169.2	171.2	172.0	174.1	175.7	.9	3.8
Excluding sales occupations	165.6	166.5	167.0	169.9	171.3	173.1	174.2	176.2	177.8	.9	3.8
Blue-collar occupations	155.2	156.6	156.9	158.7	160.8	162.2	162.6	164.1	166.4	1.4	3.5
Service occupations	157.0	158.5	159.3	161.1	162.0	163.2	164.3	166.1	167.4	.8	3.3
Transportation and public utilities	158.9	160.8	161.7	163.2	165.4	166.5	167.0	169.8	172.5	1.6	4.3
Transportation	153.9	155.4	156.1	157.8	158.9	159.4	159.6	162.0	164.7	1.7	3.7
Public utilities	165.5	168.2	169.2	170.5	174.2	176.4	177.0	180.4	183.1	1.5	5.1
Communications	166.1	169.0	170.1	171.3	175.5	178.4	179.0	182.2	183.6	.8	4.6
Electric, gas, and sanitary services	164.8	167.2	168.1	169.5	172.6	173.8	174.6	178.2	182.4	2.4	5.7
Wholesale and retail trade	159.5	159.6	159.7	161.3	162.5	164.3	165.0	166.3	168.1	1.1	3.4
Excluding sales occupations	160.0	160.3	160.4	161.8	162.7	165.0	165.9	167.4	168.6	.7	3.6
Wholesale trade	166.3	165.9	166.7	169.5	171.3	172.0	172.0	173.8	175.9	1.2	2.7
Excluding sales occupations	164.4	166.1	167.2	168.4	169.9	171.2	171.3	173.7	174.0	.2	2.4
Retail trade	155.6	156.0	155.8	156.6	157.4	159.9	161.0	162.1	163.7	1.0	4.0
General merchandise stores	154.2	156.1	155.1	156.4	159.2	161.2	165.6	165.8	166.2	.2	4.4
Food stores	154.5	156.3	156.3	157.5	158.6	159.3	160.3	162.1	163.5	.9	3.1

See footnotes at end of table.

30. Continued—Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Finance, insurance, and real estate	167.3	168.0	168.5	176.7	178.3	180.2	180.9	182.5	183.6	0.6	3.0
Excluding sales occupations	171.3	172.1	173.1	182.0	184.0	1,853.0	186.1	186.6	188.7	1.1	2.6
Banking, savings and loan, and other credit agencies	184.2	184.6	185.3	204.3	206.3	207.6	209.0	207.2	208.9	.8	1.3
Insurance	166.1	167.1	167.9	172.1	173.9	175.1	176.2	177.8	180.5	1.5	3.8
Services	163.7	164.9	165.4	167.1	168.4	170.4	171.4	173.5	175.1	.9	4.0
Business services	166.6	167.2	167.5	168.5	169.2	171.9	172.6	174.8	176.9	1.2	4.6
Health services	162.0	163.2	164.4	166.5	167.9	169.4	170.8	173.3	174.8	.9	4.1
Hospitals	164.5	166.2	168.1	170.8	171.9	173.9	175.9	178.1	179.7	.9	4.5
Educational services	169.0	173.5	175.2	176.3	177.1	180.2	181.3	183.1	184.2	.6	4.0
Colleges and universities	168.4	172.0	173.7	174.5	175.4	178.4	179.4	181.2	182.5	.7	4.0
Nonmanufacturing	161.1	162.0	162.5	164.9	166.4	168.1	169.0	170.9	172.5	.9	3.7
White-collar workers	164.1	164.8	165.3	168.0	169.3	171.2	172.1	174.1	175.7	.9	3.8
Excluding sales occupations	165.7	166.6	167.1	170.0	171.4	173.2	174.2	176.2	177.7	.9	3.7
Blue-collar occupations	154.0	155.4	155.9	157.5	159.7	161.1	161.7	163.4	165.5	1.3	3.6
Service occupations	156.9	158.4	159.2	161.1	162.0	163.2	162.4	166.0	167.3	.8	3.3
State and local government workers	156.7	160.1	161.5	162.6	163.2	165.9	166.8	168.0	168.7	.4	3.4
Workers, by occupational group:											
White-collar workers	155.7	159.3	160.7	161.7	162.2	164.9	165.7	166.8	167.5	.4	3.3
Professional specialty and technical	154.1	158.1	159.4	160.2	160.8	163.4	164.1	165.1	165.6	.3	3.0
Executive, administrative, and managerial	159.6	162.3	163.8	165.3	165.7	168.0	169.1	170.1	171.0	.5	3.2
Administrative support, including clerical	158.0	161.0	162.4	163.8	164.4	167.9	168.5	170.4	171.8	.8	4.5
Blue-collar workers	154.7	158.4	159.8	161.3	161.7	163.6	165.2	166.7	167.5	.5	3.6
Workers, by industry division:											
Services	155.9	159.7	160.9	161.8	162.3	164.9	165.7	166.5	166.8	.2	2.8
Services excluding schools[5]	158.7	161.0	162.8	164.0	164.2	166.8	168.2	169.4	170.1	.4	3.6
Health services	161.4	163.5	165.5	166.4	166.7	169.5	171.0	172.2	172.9	.4	3.7
Hospitals	161.8	164.1	166.2	167.0	167.3	170.3	171.4	172.4	173.2	.5	3.5
Educational services	155.1	159.2	160.3	161.1	161.7	164.3	165.0	165.7	165.9	.1	2.6
Schools	155.4	159.6	160.7	161.4	162.0	164.7	165.3	166.0	166.3	.2	2.7
Elementary and secondary	153.6	157.7	158.8	159.4	160.0	163.0	163.7	164.4	164.6	.1	2.9
Colleges and universities	160.4	164.7	165.8	167.0	167.5	169.2	170.0	170.7	171.0	.2	2.1
Public administration[3]	157.9	160.2	161.7	163.4	164.3	167.3	168.1	170.1	171.4	.8	4.3

[1] Cost (cents per hour worked) measured in the Employment Cost Index consists of wages, salaries, and employer cost of employee benefits.

[2] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[3] Consists of legislative, judicial, administrative, and regulatory activities.

[4] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[5] Includes, for example, library, social, and health services.

31. Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Civilian workers[1]	156.1	157.2	157.8	159.3	160.3	161.8	162.3	163.3	164.3	0.6	2.5
Workers, by occupational group:											
White-collar workers	158.4	159.6	160.1	161.9	162.9	164.5	165.1	166.1	167.1	.6	2.6
Professional specialty and technical	156.2	158.0	158.6	159.3	160.1	161.8	162.5	163.8	164.4	.4	2.7
Executive, administrative, and managerial	162.6	163.5	163.8	167.9	169.0	170.5	171.2	171.4	172.4	.6	2.0
Administrative support, including clerical	158.4	159.6	160.6	161.8	163.1	164.3	164.9	166.3	167.5	.7	2.7
Blue-collar workers	151.0	151.9	152.6	153.8	154.8	155.8	156.3	157.3	158.4	.7	2.3
Service occupations	155.1	156.2	156.9	158.0	158.7	159.8	160.6	161.2	161.9	.4	2.0
Workers, by industry division:											
Goods-producing	153.1	153.9	155.1	156.3	157.5	158.3	160.6	159.9	161.0	.7	2.2
Manufacturing	154.5	155.4	156.5	158.0	159.0	159.7	160.1	161.3	162.4	.7	2.1
Service-producing	157.2	156.4	158.8	160.5	161.4	163.0	163.6	164.6	165.5	.5	2.5
Services	158.8	160.7	161.1	161.9	162.8	164.7	165.4	166.5	167.4	.5	2.8
Health services	158.5	159.6	160.9	162.0	163.2	164.7	165.9	167.7	168.6	.5	3.3
Hospitals	158.6	160.3	162.2	163.5	164.4	166.3	167.7	169.0	169.9	.5	3.3
Educational services	155.6	159.3	160.1	160.4	160.7	162.7	163.2	163.6	163.8	.1	1.9
Public administration[2]	153.4	154.8	155.8	157.2	158.0	159.4	160.0	161.1	161.4	.2	2.2
Nonmanufacturing	156.4	157.5	158.0	159.6	160.5	162.1	162.7	163.7	164.6	.5	2.6
Private industry workers	156.3	157.0	157.5	159.3	160.4	161.7	162.3	163.4	164.5	.7	2.6
Excluding sales occupations	156.1	157.0	157.9	159.4	160.5	161.7	162.4	163.5	164.5	.6	2.5
Workers, by occupational group:											
White-collar workers	159.4	160.0	160.4	162.6	163.8	165.3	165.9	167.1	168.2	.7	2.7
Excluding sales occupations	160.0	169.8	160.8	163.6	164.8	166.2	167.0	168.1	169.2	.7	2.7
Professional specialty and technical occupations	157.4	158.2	158.5	159.5	160.5	162.1	163.0	164.7	165.5	.5	3.1
Executive, administrative, and managerial occupations	163.6	164.3	164.5	169.1	170.3	171.8	172.5	172.7	173.9	.7	2.1
Sales occupations	157.0	156.9	156.8	158.1	159.3	161.6	161.1	162.6	163.9	.8	2.9
Administrative support occupations, including clerical	159.2	160.3	161.3	162.6	164.0	165.1	165.7	167.2	168.6	.8	2.8
Blue-collar workers	150.9	151.7	152.4	153.6	154.6	155.6	156.1	157.2	158.3	.7	2.4
Precision production, craft, and repair occupations	151.0	151.8	152.3	153.4	154.7	155.5	156.2	157.1	158.3	.8	2.3
Machine operators, assemblers, and inspectors	151.6	152.0	153.2	154.7	155.3	156.8	156.9	158.6	159.8	.8	2.9
Transportation and material moving occupations	145.2	146.3	146.9	147.8	149.0	149.8	149.8	150.4	151.8	.9	1.9
Handlers, equipment cleaners, helpers, and laborers	155.1	156.0	157.2	158.4	159.0	159.9	160.6	161.8	162.7	.6	2.3
Service occupations	152.8	153.9	154.4	155.5	156.1	157.1	157.8	158.4	159.3	.6	2.0
Production and nonsupervisory occupations[3]	154.0	154.7	155.2	156.4	157.4	158.8	159.4	160.7	161.7	.6	2.7
Workers, by industry division:											
Goods-producing	153.1	153.9	155.0	156.3	157.4	158.3	158.7	159.9	160.9	.6	2.2
Excluding sales occupations	152.2	153.0	154.0	155.4	156.5	157.4	158.0	159.2	160.2	.6	2.4
White-collar occupations	156.6	157.9	158.6	160.0	161.4	161.9	162.1	163.2	164.5	.8	1.9
Excluding sales occupations	154.5	155.4	156.3	158.0	159.2	159.9	160.4	161.5	162.7	.7	2.2
Blue-collar occupations	150.7	151.5	152.6	153.8	154.8	155.9	156.4	157.7	158.6	.6	2.5
Construction	148.2	149.0	150.2	150.6	152.4	153.6	154.0	155.1	155.9	.5	2.3
Manufacturing	154.4	155.4	156.5	158.0	159.0	159.7	160.1	161.3	162.4	.7	2.1
White-collar occupations	156.6	157.7	158.6	160.1	161.6	162.0	162.1	163.3	164.7	.9	1.9
Excluding sales occupations	153.9	155.0	155.9	157.7	158.9	159.5	160.0	161.2	162.5	.8	2.3
Blue-collar occupations	152.8	153.5	154.7	156.3	156.9	157.9	158.5	159.8	160.6	.5	2.4
Durables	155.3	156.0	157.3	158.8	159.7	160.6	160.9	161.9	162.9	.6	2.0
Nondurables	153.1	154.4	155.2	156.6	157.8	158.3	158.7	160.4	161.6	.7	2.4
Service-producing	157.7	158.4	158.6	160.6	161.7	163.3	163.9	165.0	166.1	.7	2.7
Excluding sales occupations	158.5	159.3	159.6	161.7	162.8	164.2	165.0	166.0	167.1	.7	2.6
White-collar occupations	159.9	160.5	160.7	163.0	164.1	166.0	166.6	167.8	168.9	.7	2.9
Excluding sales occupations	161.6	162.5	162.8	165.3	166.5	168.2	169.0	170.2	171.2	.6	2.8
Blue-collar occupations	151.1	151.8	152.0	153.2	154.3	155.1	155.4	156.2	157.8	1.0	2.3
Service occupations	152.4	153.5	154.1	155.1	155.6	156.6	157.4	158.0	158.8	.5	2.1
Transportation and public utilities	152.1	153.4	154.1	154.8	155.6	156.0	156.5	157.6	159.1	1.0	2.2
Transportation	148.6	149.6	150.1	150.5	150.6	150.4	150.8	151.7	153.4	1.1	1.9
Public utilities	156.4	158.2	159.3	160.4	162.1	163.4	164.1	165.3	166.4	.7	2.7
Communications	157.1	159.6	160.7	161.9	163.4	165.4	165.9	167.0	167.5	.3	2.5
Electric, gas, and sanitary services	155.5	156.5	157.4	158.6	160.4	161.0	161.8	163.3	165.1	1.1	2.9
Wholesale and retail trade	155.7	155.5	155.5	156.7	157.5	159.2	159.5	160.3	161.6	.8	2.6
Excluding sales occupations	–	–	–	–	–	–	–	–	–	–	–
Wholesale trade	161.3	160.4	161.0	163.4	164.7	164.8	165.3	166.2	167.8	1.0	1.9
Excluding sales occupations	161.2	162.6	163.7	163.9	165.2	165.7	166.3	167.8	167.6	–0.1	1.5
Retail trade	152.7	152.9	152.7	153.1	153.8	156.3	156.5	157.3	158.4	.7	3.0
General merchandise stores	148.9	150.1	149.2	149.8	152.0	153.1	153.6	154.1	154.9	.5	1.9
Food stores	148.9	150.1	150.3	151.0	151.6	152.2	152.8	153.8	154.3	.3	1.8

See footnotes at end of table.

31. Continued—Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Finance, insurance, and real estate	162.0	162.4	162.6	171.1	172.4	174.1	174.5	175.2	175.3	0.1	1.7
Excluding sales occupations	165.7	166.1	167.3	176.7	178.5	179.2	210.2	179.2	180.5	.7	1.1
Banking, savings and loan, and other credit agencies	182.8	182.7	183.9	206.4	208.7	209.1	164.5	206.7	207.6	.4	–.5
Insurance	158.6	159.6	159.1	161.6	163.0	163.9	164.5	165.1	167.2	1.3	2.6
Services	160.3	161.5	161.7	162.8	164.0	165.9	166.7	168.1	169.3	.7	3.2
Business services	164.0	164.6	164.8	165.6	166.4	169.1	169.8	171.0	172.7	1.0	3.8
Health services	158.4	159.9	160.7	161.9	163.2	164.6	135.8	167.8	168.8	.6	3.4
Hospitals	158.6	160.2	162.1	163.6	164.6	166.5	167.9	169.4	170.5	.6	3.6
Educational services	161.2	165.2	166.5	167.1	167.5	170.3	171.0	171.9	172.6	.4	2.9
Colleges and universities	159.9	163.1	164.3	164.4	165.1	167.6	168.4	169.5	170.0	.3	3.0
Nonmanufacturing	156.5	157.2	157.5	159.4	160.5	162.1	162.6	163.7	164.8	.7	2.7
White-collar workers	159.6	160.2	160.5	162.8	163.9	165.7	166.3	167.5	168.6	.7	2.9
Excluding sales occupations	161.3	162.1	162.5	164.9	166.1	167.7	168.5	169.7	170.7	.6	2.8
Blue-collar occupations	149.0	149.8	150.2	151.1	152.4	153.4	153.8	154.7	156.1	.9	2.4
Service occupations	152.3	153.4	154.0	155.0	155.5	156.5	157.3	157.9	158.7	.5	2.1
State and local government workers	156.7	160.1	161.5	162.6	163.2	165.9	166.8	168.0	168.7	.2	1.9
Workers, by occupational group:											
White-collar workers	154.4	157.4	158.4	158.9	159.2	161.0	161.5	162.1	162.4	.2	2.0
Professional specialty and technical	154.1	157.5	158.4	158.8	159.1	161.0	161.4	162.1	162.3	.1	2.0
Executive, administrative, and managerial	156.8	159.0	160.1	160.9	161.0	162.5	163.3	163.5	163.8	.2	1.7
Administrative support, including clerical	152.8	155.1	156.0	156.9	157.2	159.1	159.5	160.4	160.8	.2	2.3
Blue-collar workers	152.1	154.5	155.1	156.2	156.5	157.6	158.3	158.9	159.2	.2	1.7
Workers, by industry division:											
Services	155.0	158.4	159.2	159.5	159.8	161.6	162.1	162.6	162.7	.1	1.8
Services excluding schools[4]	157.3	159.1	160.3	161.4	161.8	163.2	164.5	165.1	165.6	.3	2.3
Health services	158.6	160.5	162.2	162.9	163.5	165.1	166.7	167.4	167.8	.2	2.6
Hospitals	158.8	160.6	162.5	163.1	163.8	165.5	166.7	167.4	167.9	.3	2.5
Educational services	154.5	158.1	158.9	159.1	159.3	161.2	161.6	162.0	162.1	.1	1.8
Schools	154.6	158.3	159.0	159.2	159.5	161.4	161.8	162.1	162.3	.1	1.8
Elementary and secondary	153.6	157.4	158.1	158.2	158.5	160.6	160.9	161.3	161.5	.1	1.9
Colleges and universities	157.3	160.7	161.6	162.1	162.1	163.5	164.0	164.3	164.4	.1	1.4
Public administration[2]	153.4	154.8	155.8	157.2	158.0	159.4	160.0	161.1	161.4	.2	2.2

[1] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[2] Consists of legislative, judicial, administrative, and regulatory activities.

[3] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[4] Includes, for example, library, social, and health services.

32. Employment Cost Index, benefits, private industry workers by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Private industry workers	171.6	173.1	174.6	179.6	182.0	184.3	185.8	192.2	195.3	1.6	7.3
Workers, by occupational group:											
White-collar workers	176.1	177.2	178.5	183.6	185.5	187.7	189.2	194.4	197.4	1.5	6.4
Blue-collar workers	164.0	166.2	167.8	172.7	176.1	178.4	179.9	188.3	191.8	1.9	8.9
Workers, by industry division:											
Goods-producing	167.4	168.8	171.0	178.0	180.2	182.3	183.8	193.7	196.2	1.3	8.9
Service-producing	173.3	174.9	175.9	179.9	182.3	184.7	186.2	190.6	194.1	1.8	6.5
Manufacturing	165.5	166.8	168.9	176.9	179.0	181.1	182.3	194.4	196.9	1.3	10.0
Nonmanufacturing	173.5	175.2	176.3	180.3	182.8	185.1	186.7	190.9	194.3	1.8	6.3

33. Employment Cost Index, private nonfarm workers by bargaining status, region, and area size

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
COMPENSATION											
Workers, by bargaining status[1]											
Union	156.3	158.1	159.5	162.1	164.1	165.7	166.8	171.4	173.9	1.5	6.0
Goods-producing	154.7	156.2	157.8	161.4	163.4	164.7	165.9	172.3	174.6	1.3	6.9
Service-producing	157.6	159.9	161.1	162.6	164.6	166.5	167.5	170.2	172.9	1.6	5.0
Manufacturing	154.6	155.9	157.9	162.3	163.8	165.0	166.3	175.0	177.0	1.1	8.1
Nonmanufacturing	156.6	158.8	159.9	161.4	163.7	165.5	166.5	168.8	171.6	1.7	4.8
Nonunion	161.4	162.5	162.8	165.4	166.8	168.4	169.1	171.3	172.7	.8	3.5
Goods-producing	158.6	159.5	160.8	163.6	164.9	166.1	166.7	169.7	170.9	.7	3.6
Service-producing	162.2	162.9	163.3	165.9	167.2	169.0	169.8	171.6	173.2	.9	3.6
Manufacturing	159.1	160.1	161.3	164.5	165.8	166.9	167.3	170.6	172.0	.8	3.7
Nonmanufacturing	161.7	162.4	162.9	165.4	166.7	168.5	139.3	171.1	172.6	.9	3.5
Workers, by region[1]											
Northeast	159.9	160.5	161.3	163.8	165.2	166.9	167.9	170.2	172.3	1.2	4.3
South	157.6	158.9	159.0	160.6	161.6	163.2	163.9	166.4	167.9	.9	3.9
Midwest (formerly North Central)	162.2	163.5	164.6	169.0	170.4	171.7	172.5	174.7	176.2	.9	3.4
West	162.9	163.8	165.0	167.3	169.5	171.4	172.2	175.3	176.8	.9	4.3
Workers, by area size[1]											
Metropolitan areas	160.9	161.8	162.5	165.2	166.6	168.3	169.1	171.5	173.1	.9	3.9
Other areas	158.5	160.0	169.8	163.5	165.0	166.1	166.9	170.2	172.1	1.1	4.3
WAGES AND SALARIES											
Workers, by bargaining status[1]											
Union	149.8	151.3	152.5	153.3	154.3	155.3	156.2	157.2	158.7	1.0	2.9
Goods-producing	158.6	150.0	151.2	152.4	153.9	154.8	155.4	156.3	157.5	.8	2.3
Service-producing	151.4	152.9	154.1	154.6	155.1	156.3	157.3	158.5	160.3	1.1	3.4
Manufacturing	150.2	151.6	153.1	154.6	155.9	156.7	157.1	158.1	159.2	.7	2.1
Nonmanufacturing	149.6	151.1	152.1	152.5	153.5	154.6	155.6	156.6	158.4	1.1	3.2
Nonunion	157.5	158.1	158.5	160.4	161.5	163.0	163.4	164.6	165.6	.6	2.5
Goods-producing	154.8	155.5	156.6	157.8	158.9	159.7	160.1	161.4	162.4	.6	2.2
Service-producing	158.3	158.9	159.0	161.2	162.3	164.0	164.5	165.6	166.6	.6	2.6
Manufacturing	156.1	156.8	157.8	159.3	160.2	160.9	161.3	162.6	163.7	.7	2.2
Nonmanufacturing	157.5	158.1	158.3	160.4	161.5	163.1	163.7	164.7	165.7	.6	2.6
Workers, by region[1]											
Northeast	154.9	155.1	155.7	157.3	158.4	160.0	160.9	162.0	163.6	1.0	3.3
South	153.6	154.7	154.6	155.3	156.1	157.4	157.9	159.1	160.1	.6	2.6
Midwest (formerly North Central)	158.5	159.2	160.2	164.1	165.0	166.1	166.5	166.9	167.7	.5	1.6
West	158.7	159.3	160.1	161.3	163.1	164.7	165.2	166.8	167.9	.7	2.9
Workers, by area size[1]											
Metropolitan areas	156.7	157.4	157.9	159.6	160.7	162.2	162.7	163.8	164.9	.7	2.6
Other areas	152.6	153.8	154.8	156.8	158.0	158.9	159.5	160.8	162.1	.8	2.6

[1] The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the *Monthly Labor Review* Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

34. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, medium and large private establishments, selected years, 1980–97

Item	1980	1982	1984	1986	1988	1989	1991	1993	1995	1997
Scope of survey (in 000's)	21,352	21,043	21,013	21,303	31,059	32,428	31,163	28,728	33,374	38,409
Number of employees (in 000's):										
With medical care	20,711	20,412	20,383	20,238	27,953	29,834	25,865	23,519	25,546	29,340
With life insurance	20,498	20,201	20,172	20,451	28,574	30,482	29,293	26,175	29,078	33,495
With defined benefit plan	17,936	17,676	17,231	16,190	19,567	20,430	18,386	16,015	17,417	19,202
Time-off plans										
Participants with:										
Paid lunch time	10	9	9	10	11	10	8	9	–	–
Average minutes per day	–	25	26	27	29	26	30	29	–	–
Paid rest time	75	76	73	72	72	71	67	68	–	–
Average minutes per day	–	25	26	26	26	26	28	26	–	–
Paid funeral leave	–	–	–	88	85	84	80	83	80	81
Average days per occurrence	–	–	–	3.2	3.2	3.3	3.3	3.0	3.3	3.7
Paid holidays	99	99	99	99	96	97	92	91	89	89
Average days per year	10.1	10.0	9.8	10.0	9.4	9.2	10.2	9.4	9.1	9.3
Paid personal leave	20	24	23	25	24	22	21	21	22	20
Average days per year	–	3.8	3.6	3.7	3.3	3.1	3.3	3.1	3.3	3.5
Paid vacations	100	99	99	100	98	97	96	97	96	95
Paid sick leave [1]	62	67	67	70	69	68	67	65	58	56
Unpaid maternity leave	–	–	–	–	33	37	37	60	–	–
Unpaid paternity leave	–	–	–	–	16	18	26	53	–	–
Unpaid family leave	–	–	–	–	–	–	–	–	84	93
Insurance plans										
Participants in medical care plans	97	97	97	95	90	92	83	82	77	76
Percent of participants with coverage for:										
Home health care	–	–	46	66	76	75	81	86	78	85
Extended care facilities	58	62	62	70	79	80	80	82	73	78
Physical exam	–	–	8	18	28	28	30	42	56	63
Percent of participants with employee contribution required for:										
Self coverage	26	27	36	43	44	47	51	61	67	69
Average monthly contribution	–	–	$11.93	$12.80	$19.29	$25.31	$26.60	$31.55	$33.92	$39.14
Family coverage	46	51	58	63	64	66	69	76	78	80
Average monthly contribution	–	–	$35.93	$41.40	$60.07	$72.10	$96.97	$107.42	$118.33	$130.07
Participants in life insurance plans	96	96	96	96	92	94	94	91	87	87
Percent of participants with:										
Accidental death and dismemberment insurance	69	72	74	72	78	71	71	76	77	74
Survivor income benefits	–	–	–	10	8	7	6	5	7	6
Retiree protection available	–	64	64	59	49	42	44	41	37	33
Participants in long-term disability insurance plans	40	43	47	48	42	45	40	41	42	43
Participants in sickness and accident insurance plans	54	51	51	49	46	43	45	44	–	–
Participants in short-term disability plans [1]	–	–	–	–	–	–	–	–	53	55
Retirement plans										
Participants in defined benefit pension plans	84	84	82	76	63	63	59	56	52	50
Percent of participants with:										
Normal retirement prior to age 65	55	58	63	64	59	62	55	52	52	52
Early retirement available	98	97	97	98	98	97	98	95	96	95
Ad hoc pension increase in last 5 years	–	–	47	35	26	22	7	6	4	10
Terminal earnings formula	53	52	54	57	55	64	56	61	58	56
Benefit coordinated with Social Security	45	45	56	62	62	63	54	48	51	49
Participants in defined contribution plans	–	–	–	60	45	48	48	49	55	57
Participants in plans with tax-deferred savings arrangements	–	–	–	33	36	41	44	43	54	55
Other benefits										
Employees eligible for:										
Flexible benefits plans	–	–	–	2	5	9	10	12	12	13
Reimbursement accounts [2]	–	–	–	5	12	23	36	52	38	32
Premium conversion plans	–	–	–	–	–	–	–	–	5	7

[1] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1995 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-terms disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[2] Prior to 1995, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

35. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, small private establishments and State and local governments, 1987, 1990, 1992, 1994, and 1996

Item	Small private establishments				State and local governments			
	1990	1992	1994	1996	1987	1990	1992	1994
Scope of survey (in 000's)	32,466	34,360	35,910	39,816	10,321	12,972	12,466	12,907
Number of employees (in 000's):								
With medical care	22,402	24,396	23,536	25,599	9,599	12,064	11,219	11,192
With life insurance	20,778	21,990	21,955	24,635	8,773	11,415	11,095	11,194
With defined benefit plan	6,493	7,559	5,480	5,883	9,599	11,675	10,845	11,708
Time-off plans								
Participants with:								
Paid lunch time	8	9	–	–	17	11	10	–
Average minutes per day	37	37	–	–	34	36	34	–
Paid rest time	48	49	–	–	58	56	53	–
Average minutes per day	27	26	–	–	29	29	29	–
Paid funeral leave	47	50	50	51	56	63	65	62
Average days per occurrence	2.9	3.0	3.1	3.0	3.7	3.7	3.7	3.7
Paid holidays	84	82	82	80	81	74	75	73
Average days per year[1]	9.5	9.2	7.5	7.6	10.9	13.6	14.2	11.5
Paid personal leave	11	12	13	14	38	39	38	38
Average days per year	2.8	2.6	2.6	3.0	2.7	2.9	2.9	3.0
Paid vacations	88	88	88	86	72	67	67	66
Paid sick leave [2]	47	53	50	50	97	95	95	94
Unpaid leave	17	18	–	–	57	51	59	–
Unpaid paternity leave	8	7	–	–	30	33	44	–
Unpaid family leave	–	–	47	48	–	–	–	93
Insurance plans								
Participants in medical care plans	69	71	66	64	93	93	90	87
Percent of participants with coverage for:								
Home health care	79	80	–	–	76	82	87	84
Extended care facilities	83	84	–	–	78	79	84	81
Physical exam	26	28	–	–	36	36	47	55
Percent of participants with employee contribution required for:								
Self coverage	42	47	52	52	35	38	43	47
Average monthly contribution	$25.13	$36.51	$40.97	$42.63	$15.74	$25.53	$28.97	$30.20
Family coverage	67	73	76	75	71	65	72	71
Average monthly contribution	$109.34	$150.54	$159.63	$181.53	$71.89	$117.59	$139.23	$149.70
Participants in life insurance plans	64	64	61	62	85	88	89	87
Percent of participants with:								
Accidental death and dismemberment insurance	78	76	79	77	67	67	74	64
Survivor income benefits	1	1	2	1	1	1	1	2
Retiree protection available	19	25	20	13	55	45	46	46
Participants in long-term disability insurance plans	19	23	20	22	31	27	28	30
Participants in sickness and accident insurance plans	6	26	26	–	14	21	22	21
Participants in short-term disability plans [2]	–	–	–	29	–	–	–	–
Retirement plans								
Participants in defined benefit pension plans	20	22	15	15	93	90	87	91
Percent of participants with:								
Normal retirement prior to age 65	54	50	–	47	92	89	92	92
Early retirement available	95	95	–	92	90	88	89	87
Ad hoc pension increase in last 5 years	7	4	–	–	33	16	10	13
Terminal earnings formula	58	54	–	53	100	100	100	99
Benefit coordinated with Social Security	49	46	–	44	18	8	10	49
Participants in defined contribution plans	31	33	34	38	9	9	9	9
Participants in plans with tax-deferred savings arrangements	17	24	23	28	28	45	45	24
Other benefits								
Employees eligible for:								
Flexible benefits plans	1	2	3	4	5	5	5	5
Reimbursement accounts [3]	8	14	19	12	5	31	50	64
Premium conversion plans				7			–	–

[1] Methods used to calculate the average number of paid holidays were revised in 1994 to count partial days more precisely. Average holidays for 1994 are not comparable with those reported in 1990 and 1992.

[2] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1996 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-term disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[3] Prior to 1996, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

36. Work stoppages involving 1,000 workers or more

Measure	Annual totals		2003						2004[P]						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Number of stoppages:															
Beginning in period	19	14	0	3	0	5	0	0	0	1	1	0	2	3	0
In effect during period	20	15	1	3	2	5	3	2	1	2	1	1	2	4	1
Workers involved:															
Beginning in period (in thousands)	46	129.2	.0	8.2	.0	82.2	8.0	.0	.0	6.5	2.2	.0	103.0	27.6	.0
In effect during period (in thousands)	47	130.5	4.0	8.2	3.2	82.2	76.7	70.5	61.3	66.5	2.2	2.2	103.0	28.6	1.6
Days idle:															
Number (in thousands)	6,596	4,091.2	12.0	35.9	51.3	1,168.5	1,219.0	1,473.4	1,203.9	1,146.5	44.0	26.4	204.0	94.0	3.2
Percent of estimated working time[1]	([2])	.01	([2])	([2])	.04	.04	.05	.05	.05	.05	.00	.00	.01	.00	.00

[1] Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time worked is found in "Total economy measures of strike idleness," *Monthly Labor Review*, October 1968, pp.54–56.

[2] Less than 0.005.

NOTE: Dash indicates data not available. P = preliminary.

37. Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.	May	June	July
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	179.9	184.0	183.9	184.6	185.2	185.0	184.5	184.3	185.2	186.2	187.4	188.0	189.1	189.7	189.4
All items (1967 = 100)	538.8	551.1	550.9	553.0	554.7	554.3	552.7	552.1	554.9	557.9	561.5	563.2	566.4	568.2	567.5
Food and beverages	176.8	180.5	180.3	180.9	181.3	182.2	182.9	184.7	184.3	184.5	184.9	185.0	186.5	186.8	187.2
Food	176.2	180.0	179.7	180.4	180.7	181.7	182.4	180.0	183.8	184.1	184.4	184.5	186.1	186.3	186.8
Food at home	175.6	179.4	178.9	179.7	180.1	181.5	182.4	184.1	184.0	184.0	184.3	184.1	186.6	186.8	187.1
Cereals and bakery products	198.0	202.8	204.5	204.5	203.5	203.1	202.5	202.9	203.9	204.4	204.8	205.5	206.1	206.8	207.2
Meats, poultry, fish, and eggs	162.1	169.3	168.2	169.7	171.1	174.0	179.3	181.1	179.9	179.7	179.5	179.2	181.1	182.3	183.7
Dairy and related products[1]	168.1	167.9	164.7	167.5	170.3	171.8	171.2	173.0	172.4	172.1	171.9	174.0	185.9	188.8	187.7
Fruits and vegetables	220.9	225.9	226.6	224.9	224.4	226.3	227.5	232.4	232.4	229.7	230.1	228.3	231.7	226.7	224.5
Nonalcoholic beverages and beverage materials	139.2	139.8	138.4	139.7	139.2	140.5	137.9	139.3	140.7	141.4	140.8	139.7	169.9	139.8	140.5
Other foods at home	160.8	162.6	167.7	163.2	163.1	163.0	162.0	163.0	162.8	163.7	165.1	165.0	165.4	165.8	166.0
Sugar and sweets	159.0	162.0	162.7	162.5	162.3	162.5	161.7	161.0	163.0	163.9	163.3	162.6	163.5	162.8	163.8
Fats and oils	155.4	157.4	156.3	157.7	157.6	159.7	157.3	157.7	160.7	162.3	166.2	166.2	169.4	171.3	171.9
Other foods	177.1	178.8	179.0	179.4	179.4	178.7	177.9	179.6	178.0	178.9	180.4	180.4	180.1	180.5	180.3
Other miscellaneous foods[1,2]	109.2	110.3	111.3	109.9	111.0	110.7	109.0	109.8	109.1	109.5	111.7	110.5	110.8	110.9	109.4
Food away from home[1]	178.3	182.1	182.2	182.6	182.8	183.3	183.8	184.3	184.9	185.5	185.8	186.2	186.7	187.0	187.8
Other food away from home[1,2]	117.7	121.3	121.3	121.4	121.8	122.3	122.7	122.9	123.9	124.0	124.1	124.7	124.8	124.8	125.1
Alcoholic beverages	183.6	187.2	187.2	187.1	187.9	188.1	188.6	188.7	189.4	189.9	190.8	191.8	191.7	192.4	192.2
Housing	180.3	184.8	185.9	186.1	185.8	185.7	185.1	185.1	186.3	187.0	187.9	188.4	188.9	190.3	190.9
Shelter	208.1	213.1	213.8	214.3	213.8	214.7	214.2	213.1	215.2	216.0	217.8	218.4	218.7	219.2	220.0
Rent of primary residence	199.7	205.5	205.6	206.1	206.6	206.9	207.5	205.5	208.3	208.8	209.2	209.7	210.2	210.7	211.2
Lodging away from home	118.3	119.3	124.8	125.1	118.5	120.9	115.0	119.3	117.2	120.0	128.1	129.1	128.2	129.1	132.2
Owners' equivalent rent of primary residence[3]	214.7	219.9	219.6	220.1	220.7	221.4	221.9	219.9	222.6	222.9	223.3	223.9	224.3	224.7	225.1
Tenants' and household insurance[1,2]	108.7	114.8	115.6	115.8	115.9	116.0	114.3	114.8	114.8	115.0	115.1	115.7	116.1	116.2	116.1
Fuels and utilities	143.6	154.5	159.4	159.2	159.6	155.0	152.9	154.5	156.3	156.9	155.2	155.6	158.1	165.5	166.6
Fuels	127.2	138.2	143.6	143.0	143.4	138.2	135.7	138.7	139.2	139.5	137.6	138.0	140.4	148.5	149.5
Fuel oil and other fuels	115.5	139.5	130.5	130.7	130.5	131.4	134.8	139.1	149.9	155.1	152.5	149.6	150.4	150.7	151.1
Gas (piped) and electricity	134.4	145.0	151.6	151.0	151.5	145.6	142.6	145.0	145.5	145.5	143.5	144.2	146.8	155.8	156.9
Household furnishings and operations	128.3	126.1	126.1	125.5	125.2	125.1	124.9	124.7	125.3	125.7	125.7	125.6	125.4	125.6	125.2
Apparel	124.0	120.9	116.2	117.2	122.0	124.8	123.1	119.0	115.8	118.6	123.5	124.3	123.4	120.1	115.9
Men's and boys' apparel	121.7	118.0	113.8	113.4	117.3	120.8	121.4	118.0	115.5	117.1	119.8	120.3	120.3	117.7	115.2
Women's and girls' apparel	115.8	113.1	106.1	107.9	115.5	118.8	115.7	110.9	105.7	110.3	117.6	118.7	116.9	112.3	106.1
Infants' and toddlers' apparel[1]	126.4	122.1	117.9	120.8	124.1	125.2	123.0	119.2	117.7	119.3	121.9	120.5	118.1	116.2	114.5
Footwear	121.4	119.6	117.5	117.8	120.3	121.8	121.0	118.5	115.9	117.0	120.1	121.0	120.3	118.4	115.1
Transportation	152.9	157.6	156.8	158.3	159.4	157.1	155.7	154.7	157.0	158.8	160.5	161.8	165.2	165.7	164.0
Private transportation	148.8	153.6	152.4	154.1	155.4	153.0	151.7	150.8	153.2	154.9	156.6	157.9	161.5	161.9	160.0
New and used motor vehicles[2]	99.2	96.5	96.5	96.0	95.1	94.6	94.6	94.4	94.3	94.4	94.2	94.1	94.0	93.6	93.5
New vehicles	140.0	137.9	137.7	136.8	136.4	136.5	137.5	138.0	138.0	138.3	137.9	137.6	137.4	137.2	135.9
Used cars and trucks[1]	152.0	142.9	145.7	143.3	139.0	135.1	132.0	131.0	130.8	131.0	131.2	131.3	131.8	130.6	132.1
Motor fuel	116.6	135.8	130.6	139.0	147.1	136.6	131.2	127.8	136.7	143.1	150.5	155.9	170.5	173.3	165.2
Gasoline (all types)	116.0	135.1	130.0	138.4	146.5	136.0	130.6	127.2	136.1	142.5	149.8	155.3	169.8	172.7	164.5
Motor vehicle parts and equipment	106.9	107.8	107.6	107.9	107.7	107.9	107.9	107.8	108.0	108.0	107.8	107.9	107.9	108.2	108.8
Motor vehicle maintenance and repair	190.2	195.6	196.0	195.7	196.2	196.9	197.2	198.0	198.2	198.2	198.5	198.6	199.0	199.7	200.3
Public transportation	207.4	209.3	216.7	213.8	211.2	211.3	207.9	205.6	206.3	208.1	209.9	211.5	210.7	212.3	214.4
Medical care	285.6	297.1	297.6	298.4	299.2	299.9	300.8	302.1	303.6	306.0	307.5	308.3	309.0	310.0	311.0
Medical care commodities	256.4	262.8	263.6	264.1	264.9	264.7	264.0	265.0	265.5	266.7	267.3	268.5	269.1	269.6	269.9
Medical care services	292.9	306.0	306.4	307.2	308.2	309.1	310.6	311.9	313.8	316.6	318.4	319.2	319.8	321.0	322.3
Professional services	253.9	261.2	260.9	261.7	262.2	263.0	263.0	261.2	262.5	268.0	269.7	270.6	270.9	271.6	272.3
Hospital and related services	367.8	394.8	394.7	398.6	399.6	400.7	405.6	407.0	409.7	412.5	413.8	413.6	414.6	416.9	419.1
Recreation[2]	106.2	107.5	107.7	107.7	107.7	107.6	107.8	107.7	107.9	108.4	108.8	109.0	108.8	108.9	108.7
Video and audio[1,2]	102.6	103.6	103.7	103.7	103.5	103.5	103.8	103.3	103.6	104.1	104.3	104.7	104.6	104.4	104.4
Education and communication[2]	107.9	109.8	108.9	110.1	110.9	110.9	110.8	110.9	111.1	111.2	111.1	110.9	110.6	110.8	110.9
Education[2]	126.0	134.4	132.6	136.2	138.7	139.1	139.0	139.4	140.1	140.4	140.6	140.7	140.9	141.6	142.1
Educational books and supplies	317.6	335.4	335.0	338.5	338.2	339.7	336.0	342.8	345.4	348.6	348.9	349.5	349.6	350.6	349.5
Tuition, other school fees, and child care	362.1	362.1	381.2	392.1	400.0	401.1	401.2	401.7	403.6	404.2	404.7	404.9	405.6	407.6	409.4
Communication[1,2]	92.3	89.7	89.4	89.0	88.6	88.4	88.2	88.2	88.1	88.1	87.7	87.4	86.9	86.8	86.5
Information and information processing[1,2]	90.8	87.8	87.5	87.0	86.7	86.4	86.2	86.2	86.1	86.1	85.7	85.4	84.8	84.7	84.5
Telephone services[1,2]	99.7	98.3	98.1	97.8	97.4	97.1	97.2	97.2	97.0	97.1	96.7	96.5	95.9	95.8	95.6
Information and information processing other than telephone services[1,4]	18.3	16.1	16.0	15.7	15.6	15.6	15.4	15.3	15.3	15.2	15.2	15.0	14.9	14.9	14.8
Personal computers and peripheral equipment[1,2]	22.2	17.6	17.2	16.7	16.3	16.5	16.3	16.2	16.2	16.0	15.8	15.9	15.7	15.5	15.3
Other goods and services	293.2	298.7	299.2	299.6	299.9	300.2	300.0	300.2	301.4	302.3	303.1	303.6	303.8	304.1	305.1
Tobacco and smoking products	461.5	469.0	469.1	471.8	468.7	469.5	469.1	470.4	473.0	472.6	473.6	473.3	473.5	476.0	480.5
Personal care[1]	174.7	178.0	178.4	178.4	179.0	179.1	179.0	179.0	179.7	180.4	180.9	181.3	181.4	181.4	181.7
Personal care products[1]	154.7	153.5	154.2	153.5	153.4	153.6	153.2	153.4	153.8	154.5	154.5	154.5	154.6	153.8	153.4
Personal care services[1]	188.4	193.2	193.2	193.9	195.4	195.6	194.2	194.3	194.6	195.2	195.8	196.1	196.6	196.9	197.5

See footnotes at end of table.

37. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Miscellaneous personal services	274.4	283.5	284.1	284.3	285.3	285.8	287.0	287.1	288.8	290.4	291.6	292.7	293.1	293.6	294.4
Commodity and service group:															
Commodities	149.7	151.2	150.0	150.9	152.0	151.4	150.9	150.4	151.1	152.3	153.7	154.3	156.0	155.8	154.5
Food and beverages	176.8	180.5	180.3	180.9	181.3	182.2	182.9	184.1	184.3	184.5	184.9	185.0	186.5	186.8	187.2
Commodities less food and beverages	134.2	134.5	132.9	133.9	135.4	134.1	132.9	131.7	132.6	134.2	136.0	136.9	138.6	138.2	136.1
Nondurables less food and beverages	145.1	149.7	146.6	149.2	153.1	151.2	149.0	146.7	148.4	151.4	155.3	157.2	160.9	160.5	156.7
Apparel	124.0	120.9	116.2	117.2	122.0	124.8	123.1	119.0	115.8	118.6	123.5	124.3	123.4	120.1	115.9
Nondurables less food, beverages, and apparel	162.2	171.5	169.2	173.0	176.4	171.6	169.1	167.7	172.3	175.6	179.1	181.7	188.2	189.5	185.8
Durables	121.4	117.5	117.4	116.7	115.7	115.2	115.1	115.0	115.1	115.3	115.1	115.0	114.8	114.5	114.1
Services	209.8	216.5	217.6	218.0	218.1	218.4	217.9	217.9	219.1	219.9	221.0	221.5	221.9	223.3	224.1
Rent of shelter[3]	216.7	221.9	222.6	223.1	222.6	223.5	223.0	222.9	224.1	224.9	226.8	227.4	227.7	228.3	229.2
Transporation services	209.1	216.3	218.0	217.2	216.8	218.9	218.6	217.7	218.7	219.3	219.7	220.0	220.0	220.5	221.6
Other services	246.4	254.4	253.7	255.5	257.0	257.2	257.3	257.4	258.4	259.2	259.5	259.7	259.6	260.2	260.5
Special indexes:															
All items less food	180.5	184.7	184.6	185.3	186.0	185.6	184.9	184.4	185.5	186.6	188.0	188.6	189.6	190.3	189.9
All items less shelter	170.8	174.6	174.2	175.0	176.0	175.5	174.9	174.7	175.6	176.7	177.6	178.2	179.6	180.2	179.6
All items less medical care	174.3	178.1	178.0	178.7	179.2	179.1	178.5	178.2	179.1	180.1	181.3	181.8	182.9	183.5	183.2
Commodities less food	136.0	136.5	134.9	135.9	137.3	136.1	135.0	133.8	134.7	136.3	138.0	138.9	140.6	140.3	138.2
Nondurables less food	147.4	151.9	149.0	151.5	155.2	153.3	151.3	149.2	150.8	153.7	157.5	159.3	162.8	162.4	158.8
Nondurables less food and apparel	163.3	172.1	170.0	173.4	176.6	172.2	170.0	168.8	173.0	176.1	179.4	181.7	187.7	189.0	185.6
Nondurables	161.1	165.3	163.5	165.2	167.4	166.8	166.1	165.4	166.4	168.1	170.3	171.4	174.1	174.0	172.2
Services less rent of shelter[3]	217.5	226.4	228.0	228.4	229.2	228.7	228.2	228.4	229.7	230.6	230.7	231.1	231.7	234.2	235.0
Services less medical care services	202.5	208.7	209.8	210.3	210.3	210.5	209.9	209.9	211.0	211.7	212.7	213.2	213.6	215.0	215.8
Energy	121.7	136.5	136.8	140.6	144.6	136.9	133.1	131.8	137.4	140.6	143.1	145.9	154.1	159.7	156.3
All items less energy	187.7	190.6	190.5	190.8	191.0	191.7	191.6	191.5	191.9	192.7	193.7	194.1	194.3	194.4	194.5
All items less food and energy	190.5	193.2	193.2	193.5	193.6	194.3	193.9	193.6	194.0	194.9	196.1	196.5	196.5	196.6	196.6
Commodities less food and energy	143.7	140.9	139.9	139.7	140.2	140.4	139.9	139.0	138.5	139.3	140.3	140.5	140.2	139.4	138.2
Energy commodities	117.1	136.7	131.3	139.2	146.9	137.0	132.1	129.0	138.2	144.6	151.3	156.3	170.1	172.8	165.1
Services less energy	217.5	223.8	224.3	224.9	224.9	225.8	225.6	225.5	226.6	227.5	228.9	229.4	229.6	230.2	231.0
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	175.9	179.8	179.6	180.6	181.0	180.7	180.2	179.9	180.9	181.9	182.9	183.5	184.7	185.3	184.9
All items (1967 = 100)	523.9	535.6	535.0	537.1	539.2	538.2	536.7	536.0	538.7	541.7	544.8	546.5	550.2	551.9	550.8
Food and beverages	176.1	179.9	179.6	180.2	180.7	181.7	182.4	183.6	183.8	184.0	184.4	184.5	186.0	186.4	186.8
Food	176.5	179.4	179.1	179.7	180.2	181.2	181.9	183.1	183.3	183.5	183.8	183.9	185.6	185.9	186.3
Food at home	175.1	178.5	178.0	178.8	179.4	180.7	181.6	183.3	183.2	183.2	183.5	183.3	185.8	186.1	186.3
Cereals and bakery products	198.0	202.8	204.4	204.5	203.5	203.2	202.4	202.4	203.8	204.4	204.9	205.5	206.0	206.7	207.2
Meats, poultry, fish, and eggs	162.0	169.2	168.2	169.5	170.9	173.8	179.2	181.0	179.9	179.7	179.6	179.1	181.1	182.4	183.7
Dairy and related products[1]	167.2	167.6	164.4	167.0	170.2	171.7	171.0	172.7	172.2	171.7	171.3	173.6	186.1	189.0	187.8
Fruits and vegetables	222.9	224.3	225.3	223.8	223.4	224.9	225.3	229.7	229.7	227.5	227.8	225.5	228.9	224.3	222.3
Nonalcoholic beverages and beverage materials	138.6	139.1	137.5	138.9	138.5	139.8	137.3	138.6	140.0	140.8	140.1	139.1	139.3	139.3	139.8
Other foods at home	160.4	162.2	162.3	162.6	162.8	162.5	161.6	162.5	162.3	163.3	164.7	164.6	165.1	165.5	165.6
Sugar and sweets	158.8	161.6	162.3	162.1	162.1	162.1	161.4	160.5	162.4	163.2	162.6	161.9	162.9	162.2	162.9
Fats and oils	155.3	157.4	156.2	157.7	157.6	159.6	157.3	157.7	160.7	162.2	166.0	166.1	169.4	171.4	172.0
Other foods	177.6	179.2	179.4	179.7	180.0	179.0	178.3	180.0	178.4	179.4	180.8	180.8	180.5	180.8	180.7
Other miscellaneous foods[1,2]	109.7	110.8	111.6	110.0	111.3	111.2	109.5	110.3	109.6	110.1	112.2	111.0	111.2	111.4	109.7
Food away from home[1]	178.2	182.0	182.1	182.4	182.7	183.3	183.7	184.2	184.8	185.3	185.6	186.1	186.6	186.8	187.6
Other food away from home[1,2]	118.1	121.5	121.4	121.6	122.0	122.5	122.9	123.1	123.6	123.8	123.8	124.3	124.6	124.7	124.9
Alcoholic beverages	183.3	187.1	187.0	186.9	187.7	188.1	188.8	188.9	189.5	190.0	191.2	192.1	192.0	192.7	192.2
Housing	175.7	180.4	181.4	181.6	181.6	181.3	180.9	181.0	182.1	182.6	183.2	183.6	184.1	185.6	186.2
Shelter	201.9	206.9	207.2	207.7	207.6	208.3	208.2	208.2	209.2	209.8	211.0	211.5	211.8	212.2	213.0
Rent of primary residence	199.0	204.7	204.8	205.3	205.8	206.1	206.6	207.0	207.4	208.0	208.4	208.9	209.4	209.9	210.3
Lodging away from home[2]	118.4	119.8	125.0	125.2	119.8	121.7	116.2	113.4	118.5	121.1	128.8	129.8	128.2	128.8	133.0
Owners' equivalent rent of primary residence[3]	195.1	199.7	199.4	199.9	200.4	201.0	201.4	201.7	202.1	202.3	202.7	203.1	203.6	203.9	204.2
Tenants' and household insurance[1,2]	108.7	114.7	115.4	115.7	115.8	116.0	114.4	114.4	114.9	115.1	115.2	116.0	116.4	116.5	116.3
Fuels and utilities	142.9	153.9	158.9	158.7	159.1	154.3	152.3	153.0	155.6	156.2	154.7	155.1	157.4	165.0	166.1
Fuels	126.1	137.0	142.4	141.9	142.3	137.0	134.7	135.4	138.0	138.3	136.6	137.0	139.3	147.4	148.4
Fuel oil and other fuels	115.0	138.7	129.6	129.6	129.4	130.7	134.4	136.2	149.6	154.5	152.0	148.9	149.6	149.8	150.2
Gas (piped) and electricity	133.4	144.1	150.6	150.1	150.6	144.6	141.9	142.5	144.7	144.7	142.9	143.5	146.1	155.1	156.2
Household furnishings and operations	124.4	121.9	121.9	121.4	121.0	120.9	120.7	120.4	121.0	121.4	121.4	121.3	121.1	121.3	120.7
Apparel	123.1	120.0	115.2	116.1	121.0	123.9	122.6	118.7	115.7	118.3	122.9	123.8	122.8	119.6	115.6
Men's and boys' apparel	121.7	117.5	113.4	112.9	116.5	120.0	121.1	117.8	115.6	117.4	120.0	120.6	120.3	117.8	115.2
Women's and girls' apparel	114.6	112.1	105.0	106.9	114.5	118.2	115.3	110.5	105.5	109.8	117.4	118.4	116.7	112.2	106.0
Infants' and toddlers' apparel[1]	128.6	124.1	120.3	122.9	126.5	127.7	125.0	121.4	120.1	122.2	125.2	123.4	120.9	118.8	117.0
Footwear	121.2	119.1	116.9	117.2	119.6	121.1	120.4	117.8	115.6	116.4	118.6	119.6	119.0	117.0	114.4
Transportation	151.8	156.3	155.5	157.1	158.1	155.4	153.6	152.5	154.9	156.8	158.5	159.9	163.6	164.0	162.2
Private transportation	149.0	153.5	152.5	154.2	155.3	152.5	150.8	149.7	152.2	154.0	155.7	157.1	160.9	161.3	159.3
New and used motor vehicles[2]	99.4	96.0	96.3	95.7	94.4	93.5	93.1	92.8	92.7	92.8	92.6	92.6	92.5	92.1	92.1

See footnotes at end of table.

37. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
New vehicles	141.1	139.0	137.7	137.9	137.6	137.8	138.7	139.2	139.2	139.5	139.0	138.7	138.5	138.2	137.0
Used cars and trucks[1]	152.8	143.7	146.4	144.0	139.8	135.9	132.8	131.7	131.6	131.7	132.0	132.1	132.6	131.4	133.0
Motor fuel	117.0	136.1	130.9	139.4	147.5	136.9	131.5	128.1	137.1	143.6	150.9	156.5	171.1	173.8	165.6
Gasoline (all types)	116.4	135.5	130.4	138.9	147.0	136.4	130.9	127.6	136.6	143.0	150.3	155.8	170.4	173.2	165.0
Motor vehicle parts and equipment	106.1	107.3	107.0	107.3	107.2	107.5	107.5	107.3	107.6	107.6	107.4	107.5	107.5	107.8	108.2
Motor vehicle maintenance and repair	191.7	197.3	197.7	197.3	197.9	198.6	198.9	199.8	199.9	200.1	200.3	200.4	200.8	201.5	202.1
Public transportation	202.6	206.0	212.8	210.5	208.4	208.7	205.8	203.6	204.6	206.2	208.0	209.4	208.8	210.0	212.1
Medical care	284.6	296.3	296.7	297.4	298.3	299.1	300.1	301.4	302.8	305.4	306.9	307.7	308.4	309.4	310.4
Medical care commodities	251.1	257.4	258.2	258.6	259.4	259.2	258.5	259.4	259.8	260.9	261.5	262.5	263.3	263.8	263.7
Medical care services	292.5	305.9	306.3	307.0	307.9	309.1	310.6	311.9	313.8	316.8	318.6	319.4	320.0	321.2	322.4
Professional services	256.0	263.4	264.1	263.9	264.4	265.2	265.2	266.5	267.8	270.6	272.3	273.2	273.5	274.1	274.8
Hospital and related services	363.2	391.2	390.9	394.2	395.8	397.5	402.4	403.4	405.9	408.7	409.9	409.8	410.7	413.0	415.2
Recreation[2]	104.6	105.5	105.6	105.7	105.5	105.4	105.6	105.5	105.6	106.2	106.5	106.7	106.6	106.7	106.3
Video and audio[1,2]	102.0	102.9	102.9	102.9	102.7	102.8	103.0	102.5	102.7	103.2	103.5	103.9	103.9	103.7	103.7
Education and communication[2]	107.6	109.0	108.2	109.1	109.7	109.7	109.6	109.7	109.8	110.0	109.8	109.6	109.2	109.4	109.4
Education[2]	125.9	133.8	132.3	135.5	137.8	138.1	138.0	138.0	139.1	139.4	139.6	139.7	139.9	140.6	141.0
Educational books and supplies	318.5	336.5	336.3	339.6	339.6	340.6	337.5	343.8	346.1	349.5	349.9	350.4	350.4	351.5	350.4
Tuition, other school fees, and child care	354.8	377.3	372.6	382.1	389.2	390.1	390.2	390.7	392.8	393.3	393.8	394.1	394.6	396.7	398.1
Communication[1,2]	93.7	91.2	90.9	90.5	90.2	89.9	89.8	89.7	89.6	89.6	89.3	89.0	88..4	88.4	88.1
Information and information processing[1,2]	92.7	89.9	89.6	89.1	89.1	88.5	88.4	88.3	88.2	88.2	87.9	87.5	87.0	86.9	86.7
Telephone services[1,2]	99.9	98.5	98.3	98.0	97.6	97.3	97.4	97.4	97.2	97.3	96.9	96.7	96.1	96.1	95.8
Information and information processing other than telephone services[1,4]	19.0	16.7	16.5	16.3	16.1	16.2	15.9	15.8	15.8	15.8	15.7	15.5	15.4	15.4	15.3
Personal computers and peripheral equipment[1,2]	21.8	17.3	16.9	16.3	16.0	16.2	16.0	15.9	15.8	15.7	15.5	15.6	15.4	15.2	15.0
Other goods and services	302.0	307.0	307.5	308.0	307.9	308.2	307.7	308.1	309.3	310.0	310.8	311.3	311.5	311.8	313.2
Tobacco and smoking products	463.2	470.5	470.5	473.2	469.9	470.7	470.2	471.5	473.8	473.2	474.2	474.1	474.4	476.9	481.6
Personal care[1]	174.1	177.0	177.5	177.4	177.9	178.0	177.7	177.8	177.4	179.1	179.7	180.1	180.2	180.0	180.3
Personal care products[1]	155.5	154.2	154.8	154.3	154.0	154.1	153.8	154. 2	154.3	155.0	155.0	155.1	155.1	154.3	153.9
Personal care services[1]	189.1	193.9	193.9	194.6	196.1	196.3	194.8	194.9	195.1	195.7	196.3	196.6	197.1	197.5	198.1
Miscellaneous personal services	274.0	283.3	284.0	284.4	285.2	285.6	286.7	286.6	288.4	290.2	291.6	292.9	293.1	293.5	294.7
Commodity and service group:															
Commodities	150.4	151.8	150.7	151.6	152.7	151.9	151.3	150.7	151.5	152.7	154.1	154.8	156.7	156.6	155.2
Food and beverages	176.1	179.9	179.6	180.2	180.7	181.7	182.4	183.6	183.8	184.0	184.4	184.5	186.0	186.4	186.8
Commodities less food and beverages	135.5	135.8	134.2	135.4	136.7	135.2	133.8	132.5	133.5	135.2	137.0	138.0	140.0	139.6	137.5
Nondurables less food and beverages	147.0	152.1	148.7	151.7	155.9	153.6	151.4	149.0	151.0	154.3	158.4	160.5	164.7	164.4	160.4
Apparel	123.1	120.0	115.2	116.1	121.0	123.9	122.6	118.7	115.7	118.3	122.9	123.8	122.8	119.6	115.6
Nondurables less food, beverages, and apparel	165.3	175.6	173.0	177.4	181.2	175.7	172.9	171.6	176.5	180.2	184.1	187.0	194.5	196.0	191.8
Durables	121.8	117.4	117.6	116.9	115.5	114.7	114.2	114.0	114.0	1142.0	114.0	113.9	113.9	113.5	113.2
Services	205.9	212.6	213.6	214.0	214.3	214.4	214.1	214.2	215.3	216.0	216.7	217.1	217.6	219.0	219.7
Rent of shelter[3]	194.5	199.2	199.5	200.0	199.9	200.6	200.5	200.6	201.4	202.0	203.2	203.7	203.9	204.4	205.1
Transporatation services	207.7	216.2	217.4	216.8	216.8	219.0	218.8	218.0	219.1	219.7	220.0	220.2	220.3	220.7	221.6
Other services	241.6	248.5	247.9	249.3	250.6	250.7	250.7	250.9	251.8	252.6	252.9	253.0	252.7	253.3	253.5
Special indexes:															
All items less food	175.8	179.7	179.6	180.3	181.0	180.4	179.7	179.2	180.2	181.4	182.6	183.2	184.4	185.0	184.5
All items less shelter	168.3	171.9	171.5	172.3	173.3	172.6	171.9	171.6	172.5	173.7	174.7	175.3	176.8	177.5	176.7
All items less medical care	171.1	174.8	174.5	175.2	176.0	175.6	175.0	174.7	175.6	176.6	177.6	178.2	179.4	180.0	179.6
Commodities less food	137.3	137.7	136.1	137.2	138.6	137.0	135.8	134.5	135.5	137.1	138.9	139.9	141.8	141.5	139.4
Nondurables less food	149.2	154.2	151.0	151.0	157.9	155.7	153.7	151.4	153.3	156.4	160.4	162.4	166.4	166.2	162.3
Nondurables less food and apparel	166.1	175.9	173.5	177.5	181.1	176.1	173.6	172.1	176.9	180.2	184.0	186.6	193.5	194.8	191.0
Nondurables	161.4	166.4	164.6	166.4	168.8	168.1	167.3	166.6	167.8	169.5	171.8	173.0	175.9	175.9	174.0
Services less rent of shelter[3]	193.1	201.3	202.8	203.1	203.7	203.2	202.7	202.9	204.1	204.9	204.9	205.2	205.8	208.2	208.9
Services less medical care services	198.9	205.2	206.2	206.6	206.8	206.9	206.5	206.6	207.6	208.2	208.8	209.2	209.7	211.1	211.8
Energy	120.9	135.9	135.9	140.0	144.2	136.3	132.4	131.1	136.9	140.2	143.0	146.0	154.5	159.9	156.2
All items less energy	183.6	186.1	185.9	186.2	186.4	187.0	187.0	186.9	187.2	187.9	188.7	189.0	189.3	189.3	189.3
All items less food and energy	185.6	187.9	187.7	187.9	188.1	188.6	188.4	188.0	188.3	189.1	190.1	190.4	190.4	190.3	190.3
Commodities less food and energy	144.4	141.1	140.3	140.1	140.2	140.3	139.7	141.1	138.2	139.0	140.0	140.1	139.9	139.0	138.0
Energy commodities	17.3	136.8	131.4	139.5	147.2	137.2	132.1	136.8	138.3	144.7	151.5	156.7	170.7	173.3	165.5
Services less energy	213.9	220.2	220.5	221.0	221.3	222.1	222.1	222.1	223.1	223.9	224.9	225.3	225.5	226.0	226.7

[1] Not seasonally adjusted.

[2] Indexes on a December 1997 = 100 base.

[3] Indexes on a December 1982 = 100 base.

[4] Indexes on a December 1988 = 100 base.

Dash indicates data not available.

NOTE: Index applied to a month as a whole, not to any specific date.

38. Consumer Price Index: U.S. city average and available local area data: all items

[1982–84 = 100, unless otherwise indicated]

	Pricing schedule[1]	All Urban Consumers 2004						Urban Wage Earners 2004					
		Feb.	Mar.	Apr.	May	June	July	Feb.	Mar.	Apr.	May	June	July
U.S. city average	M	186.2	187.4	188.0	189.1	189.7	189.4	181.9	182.9	183.5	184.7	185.3	184.9
Region and area size[2]													
Northeast urban	M	196.8	198.6	199.4	199.9	201.1	201.0	193.6	195.1	195.7	196.4	197.5	197.3
Size A—More than 1,500,000	M	198.6	200.7	201.4	202.0	203.3	203.0	194.3	195.9	196.3	197.1	198.3	198.0
Size B/C—50,000 to 1,500,000[3]	M	116.6	117.4	118.1	118.3	118.7	119.2	116.7	117.5	118.1	118.4	118.8	119.1
Midwest urban[4]	M	180.2	181.0	181.5	182.9	183.3	183.2	175.3	175.8	176.3	177.8	178.2	178
Size A—More than 1,500,000	M	182.5	183.1	183.7	185.0	185.3	185.4	176.9	177.2	177.9	179.4	179.4	179.5
Size B/C—50,000 to 1,500,000[3]	M	114.7	115.2	115.6	116.4	116.8	116.3	113.8	114.2	114.6	115.5	116.0	115.5
Size D—Nonmetropolitan (less than 50,000)	M	173.0	174.1	173.9	176.0	176.9	177.1	170.6	171.4	171.2	173.2	174.1	173.7
South urban	M	179.1	180.1	180.9	182.0	182.9	182.6	179.1	180.1	180.9	178.9	179.7	179.3
Size A—More than 1,500,000	M	180.8	181.8	182.5	183.4	184.3	183.7	178.0	178.9	179.7	180.8	181.9	181.2
Size B/C—50,000 to 1,500,000[3]	M	114.3	114.9	115.6	116.4	117.0	116.9	112.7	113.4	114.0	114.8	115.3	115.2
Size D—Nonmetropolitan (less than 50,000)	M	176.8	177.7	178.7	179.4	180.5	180.1	176	176.9	177.8	179	180	179.4
West urban	M	190.8	192.2	192.3	193.4	193.3	192.9	185.7	187.1	187.3	188.6	188.6	188.0
Size A—More than 1,500,000	M	193.2	194.5	194.6	195.9	195.9	195.4	186.5	187.9	188.2	189.6	189.7	188.9
Size B/C—50,000 to 1,500,000[3]	M	117.0	117.9	117.8	118.2	117.9	117.9	116.4	117.2	117.2	117.8	117.6	117.4
Size classes:													
A[5]	M	170.4	171.5	172.0	172.9	173.4	173.1	168.6	169.6	170.0	171.2	171.7	171.3
B/C[3]	M	115.2	115.9	116.3	117.0	117.3	117.3	114.2	114.9	115.3	116.0	116.4	116.2
D	M	177.9	178.9	179.3	180.9	181.8	181.3	175.8	176.7	177.2	178.8	179.7	179.0
Selected local areas[6]													
Chicago–Gary–Kenosha, IL–IN–WI	M	186.4	186.3	187.2	188.7	189.1	189.2	179.9	179.7	180.6	182.2	182.5	182.4
Los Angeles–Riverside–Orange County, CA	M	190.1	191.5	191.9	193.3	193.7	193.4	186.4	184.9	185.2	186.8	187.4	186.8
New York, NY–Northern NJ–Long Island, NY–NJ–CT–PA	M	201.1	203.4	204.0	204.4	206.0	205.5	196.3	198.2	198.5	199.1	200.4	200.1
Boston–Brockton–Nashua, MA–NH–ME–CT	1	–	208.7	–	181.3	–	208.9	–	207.4	–	207.9	–	207.9
Cleveland–Akron, OH	1	–	180.0	–	179.1	–	181.7	–	171.0	–	172.6	–	172.8
Dallas–Ft Worth, TX	1	–	177.7	–	118.9	–	179.1	–	177.6	–	179.5	–	179.4
Washington–Baltimore, DC–MD–VA–WV[7]	1	–	118.1	–	118.9	–	120.2	–	117.6	–	118.4	–	119.7
Atlanta, GA	2	180.8	–	182.3	–	185.7	–	178.7	–	180.0	–	184.0	–
Detroit–Ann Arbor–Flint, MI	2	183.4	–	184.7	–	185.8	–	178.1	–	179.3	–	180.4	–
Houston–Galveston–Brazoria, TX	2	168.5	–	169.7	–	169.3	–	165.7	–	166.8	–	167.6	–
Miami–Ft. Lauderdale, FL	2	183.6	–	185.2	–	185.6	–	180.8	–	182.6	–	183.4	–
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD	2	191.4	–	194.8	–	198.0	–	191.2	–	194.0	–	197.3	–
San Francisco–Oakland–San Jose, CA	2	198.1	–	198.3	–	199.0	–	194.1	–	194.7	–	195.4	–
Seattle–Tacoma–Bremerton, WA	2	193.5	–	194.3	–	195.3	–	187.8	–	189.1	–	190.4	–

[1] Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated:
M—Every month.
1—January, March, May, July, September, and November.
2—February, April, June, August, October, and December.

[2] Regions defined as the four Census regions.

[3] Indexes on a December 1996 = 100 base.

[4] The "North Central" region has been renamed the "Midwest" region by the Census Bureau. It is composed of the same geographic entities.

[5] Indexes on a December 1986 = 100 base.

[6] In addition, the following metropolitan areas are published semiannually and appear in tables 34 and 39 of the January and July issues of the *CPI Detailed Report*: Anchorage, AK; Cincinnatti, OH–KY–IN; Kansas City, MO–KS; Milwaukee–Racine, WI; Minneapolis–St. Paul, MN–WI; Pittsburgh, PA; Port-land–Salem, OR–WA; St Louis, MO–IL; San Diego, CA; Tampa–St. Petersburg–Clearwater, FL.

[7] Indexes on a November 1996 = 100 base.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in their escalator clauses. Index applies to a month as a whole, not to any specific date.

Dash indicates data not available.

39. Annual data: Consumer Price Index, U.S. city average, all items and major groups

[1982–84 = 100]

Series	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Consumer Price Index for All Urban Consumers:											
All items:											
Index	144.5	148.2	152.4	156.9	160.5	163.0	166.6	172.2	177.1	179.9	184.0
Percent change	3.0	2.6	2.8	3.0	2.3	1.6	2.2	3.4	2.8	1.6	2.3
Food and beverages:											
Index	141.6	144.9	148.9	153.7	157.7	161.1	164.6	168.4	173.6	176.8	180.5
Percent change	2.1	2.3	2.8	3.2	2.6	2.2	2.2	2.3	3.1	1.8	2.1
Housing:											
Index	141.2	144.8	148.5	152.8	156.8	160.4	163.9	169.6	176.4	180.3	184.8
Percent change	2.7	2.5	2.6	2.9	2.6	2.3	2.2	3.5	4.0	2.2	2.5
Apparel:											
Index	133.7	133.4	132.0	131.7	132.9	133.0	131.3	129.6	127.3	124.0	120.9
Percent change	1.4	–.2	–1.0	–.2	.9	.1	–1.3	–1.3	–1.8	–2.6	–2.5
Transportation:											
Index	130.4	134.3	139.1	143.0	144.3	141.6	144.4	153.3	154.3	152.9	157.6
Percent change	3.1	3.0	3.6	2.8	0.9	–1.9	2.0	6.2	0.7	–.9	3.1
Medical care:											
Index	201.4	211.0	220.5	228.2	234.6	242.1	250.6	260.8	272.8	285.6	297.1
Percent change	5.9	4.8	4.5	3.5	2.8	3.2	3.5	4.1	4.6	4.7	4.0
Other goods and services:											
Index	192.9	198.5	206.9	215.4	224.8	237.7	258.3	271.1	282.6	293.2	298.7
Percent change	5.2	2.9	4.2	4.1	4.4	5.7	8.7	5.0	4.2	3.8	1.9
Consumer Price Index for Urban Wage Earners and Clerical Workers:											
All items:											
Index	142.1	145.6	149.8	154.1	157.6	159.7	163.2	168.9	173.5	175.9	179.8
Percent change	2.8	2.5	2.9	2.9	2.3	1.3	2.2	3.5	2.7	1.4	2.2

40. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		2003						2004						
	2002	2003	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[P]	May[P]	June[P]	July[P]
Finished goods	138.9	143.3	143.0	143.7	144.0	145.5	144.5	144.5	145.4	145.3	146.2	147.3	149.1	148.7	148.7
Finished consumer goods	139.4	145.3	145.1	145.9	146.4	147.7	146.5	146.7	147.8	147.6	148.7	150.2	152.6	152.0	152.0
Finished consumer foods	140.1	145.9	144.9	146.3	148.0	151.0	150.1	150.3	148.1	148.0	150.3	152.5	155.3	154.5	152.1
Finshed consumer goods excluding foods	138.8	144.7	144.8	145.4	145.5	146.2	144.8	145.0	147.4	147.1	147.7	148.9	151.1	150.7	151.7
Nondurable goods less food	139.8	148.4	149.2	150.0	150.4	149.4	147.6	148.2	151.7	151.3	152.0	154.0	157.0	156.3	157.9
Durable goods	133.0	133.1	131.7	131.8	131.1	135.6	135.0	134.3	134.3	134.3	134.8	134.3	134.8	135.0	134.6
Capital equipment	139.1	139.5	138.9	139.2	138.9	140.8	140.5	140.2	140.5	140.8	141.1	141.0	141.1	141.3	141.2
Intermediate materials, supplies, and components	127.8	133.7	133.7	134.1	134.1	134.1	134.1	134.5	136.2	137.1	137.9	139.8	141.9	142.7	143.8
Materials and components for manufacturing	126.1	129.7	129.2	129.8	129.8	130.5	130.7	130.9	131.9	133.2	134.1	135.9	137.3	138.0	138.6
Materials for food manufacturing	123.2	134.4	133.3	135.5	137.4	141.8	141.6	140.7	138.4	138.9	141.1	146.1	151.6	151.9	147.9
Materials for nondurable manufacturing	129.2	137.2	136.3	137.5	136.4	137.5	137.2	137.9	140.2	141.1	141.7	143.2	144.5	145.7	147.1
Materials for durable manufacturing	124.7	127.9	127.1	127.5	128.6	129.5	130.5	131.2	132.9	137.0	170.0	143.5	146.2	147.9	149.4
Components for manufacturing	126.1	125.9	125.8	125.8	125.8	125.8	125.8	125.8	125.9	126.2	126.2	127.0	127.4	127.6	127.8
Materials and components for construction	151.3	153.6	153.6	153.7	155.0	155.2	155.6	155.6	156.2	158.3	160.7	163.6	166.2	167.3	167.8
Processed fuels and lubricants	96.3	112.6	113.7	114.5	113.7	111.5	110.3	111.7	116.8	116.3	116.3	118.1	122.1	123.7	126.5
Containers	152.1	153.7	153.8	153.6	153.5	153.2	153.4	153.5	153.9	153.8	154.1	154.3	156.8	158.0	159.5
Supplies	138.9	141.5	141.5	141.2	141.7	141.9	142.6	142.8	143.2	143.8	144.8	146.4	147.2	147.3	148.1
Crude materials for further processing	108.1	135.3	132.6	131.3	134.7	138.3	137.0	141.1	147.8	148.3	149.7	154.1	159.6	162.3	162.0
Foodstuffs and feedstuffs	99.5	113.5	107.6	111.5	119.0	128.1	125.7	124.7	117.1	121.0	130.8	135.1	142.1	137.4	131.0
Crude nonfood materials	111.4	148.2	148.2	142.7	142.8	141.1	141.4	149.5	167.3	164.9	159.8	164.1	168.3	176.6	181.3
Special groupings:															
Finished goods, excluding foods	138.3	142.4	142.2	142.7	142.7	143.8	142.8	142.8	144.5	144.4	144.9	145.7	147.2	147.0	147.6
Finished energy goods	88.8	102.0	103.4	104.7	105.2	103.2	100.4	101.0	106.0	105.7	107.0	109.3	113.7	112.8	115.1
Finished goods less energy	147.3	149.0	148.2	148.7	149.0	151.4	151.0	150.9	150.6	150.6	151.3	152.0	152.9	152.7	152.1
Finished consumer goods less energy	150.8	153.1	152.3	152.8	153.3	156.1	155.5	155.5	154.9	154.7	155.7	156.7	158.1	157.8	156.8
Finished goods less food and energy	150.2	150.5	149.8	149.9	149.7	152.0	151.7	151.4	151.8	151.7	152.0	152.2	152.5	152.5	152.4
Finished consumer goods less food and energy	157.6	157.9	157.1	157.2	157.0	159.5	159.2	159.0	159.4	159.1	159.3	159.7	160.1	160.1	160.0
Consumer nondurable goods less food and energy	177.5	177.9	177.8	178.0	177.8	178.6	178.5	178.9	179.7	179.1	179.0	180.2	180.6	180.3	180.5
Intermediate materials less foods and feeds	128.5	134.2	134.2	134.6	134.5	134.4	134.2	134.7	136.5	137.4	138.2	139.8	141.7	142.8	144.0
Intermediate foods and feeds	115.5	125.9	124.4	125.0	128.4	131.9	134.8	134.1	132.2	132.5	136.4	143.0	147.6	144.6	143.2
Intermediate energy goods	95.9	111.9	113.0	114.3	112.8	110.7	109.5	110.9	115.8	115.3	115.3	117.1	121.1	122.7	125.4
Intermediate goods less energy	134.5	137.7	137.4	137.5	138.0	138.5	138.8	139.0	169.8	141.0	142.1	144.0	145.5	146.1	146.8
Intermediate materials less foods and energy	135.8	138.5	138.3	138.4	138.7	139.0	139.2	139.5	140.4	141.6	142.6	144.2	145.5	146.4	147.1
Crude energy materials	102.0	147.2	148.7	139.7	138.2	134.3	132.5	141.8	163.5	156.7	147.1	156.3	165.3	178.0	178.3
Crude materials less energy	108.7	123.4	118.0	121.7	128.2	135.9	135.5	136.2	133.3	138.2	146.6	147.8	151.0	147.1	146.5
Crude nonfood materials less energy	135.7	152.5	148.8	151.8	155.5	159.5	164.8	170.1	179.3	187.2	192.2	185.3	178.3	176.7	191.6

41. Producer Price Indexes for the net output of major industry groups

[December 2003 = 100, unless otherwise indicated]

NAICS	Industry	2003	2004						
		Dec.	Jan.	Feb.	Mar.	Apr.[p]	May[p]	June[p]	July[p]
–	**Total mining industries (December 1984=100)**	129.0	144.6	140.3	136.6	138.5	145.0	153.8	155.2
211	Oil and gas extraction(December 1985=100)	155.1	181.1	172.5	165.4	168.6	180.1	195.3	196.9
212	Mining, except oil and gas	100.0	103.3	105.2	105.9	107.1	107.5	107.8	108.5
213	Mining support activities	100.0	101.2	100.8	100.8	99.9	100.5	102.2	103.5
–	**Total manufacturing industries (December 1984=100)**	137.7	138.9	139.3	140.3	141.8	143.4	143.0	143.4
311	Food manufacturing (December 1984=100)	141.1	139.3	140.4	142.4	145.8	148.9	148.3	146.7
312	Beverage and tobacco manufacturing	100.0	101.4	101.2	100.7	101.7	101.2	101.3	100.9
313	Textile mills	100.0	100.4	100.3	100.2	100.5	100.8	101.4	101.6
315	Apparel manufacturing	100.0	99.9	99.7	99.8	100.0	100.0	99.8	99.6
316	Leather and allied product manufacturing (December 1984=100)	143.4	143.3	143.6	143.8	143.5	143.6	143.1	143.6
321	Wood products manufacturing	100.0	99.3	102.7	105.9	108.1	110.2	108.4	106.7
322	Paper manufacturing	100.0	99.3	99.4	99.5	100.0	100.9	102.1	103.4
323	Printing and related support activities	100.0	100.2	100.2	100.4	101.1	100.9	101.0	101.3
324	Petroleum and coal products manufacturing (December 1984=100)	117.5	131.5	130.7	134.3	141.5	152.3	143.9	152.0
325	Chemical manufacturing (December 1984=100)	165.3	167.0	167.9	168.8	169.2	170.1	171.7	172.0
326	Plastics and rubber products manufacturing (December 1984=100)	128.8	128.9	129.4	129.6	130.1	130.6	131.1	131.4
331	Primary metal manufacturing (December 1984=100)	121.4	124.0	128.5	132.3	136.9	141.3	145.1	147.6
332	Fabricated metal product manufacturing (December 1984=100)	133.7	134.6	135.7	137.5	138.6	140.7	142.0	142.6
333	Machinery manufacturing	100.0	100.3	100.6	100.9	101.3	101.6	101.7	102.1
334	Computer and electronic products manufacturing	100.0	99.8	99.5	99.3	100.1	99.9	99.3	99.0
335	Electrical equipment, appliance, and components manufacturing	100.0	100.2	100.7	101.8	102.7	103.5	103.6	103.7
336	Transportation equipment manufacturing	100.0	100.2	100.1	100.4	100.1	100.4	100.6	100.4
337	Furniture and related product manufacturing(December 1984=100)	147.6	147.4	148.7	149.0	149.1	150.9	152.9	152.1
339	Miscellaneous manufacturing	100.0	100.5	100.9	100.8	101.1	100.9	101.0	101.3
	Retail trade								
441	Motor vehicle and parts dealers	100.0	101.6	101.7	103.2	101.7	103.3	104.3	104.0
442	Furniture and home furnishings stores	100.0	99.5	100.8	101.8	100.6	101.1	102.8	102.5
443	Electronics and appliance stores	100.0	101.4	99.7	99.9	94.1	95.8	98.9	99.9
446	Health and personal care stores	100.0	99.6	99.9	96.9	98.7	98.3	97.5	99.5
447	Gasoline stations (June 2001=100)	47.9	45.5	46.6	55.4	52.6	50.3	59.0	46.0
454	Nonstore retailers	100.0	102.9	105.4	113.2	108.6	106.3	106.8	106.1
	Transportation and warehousing								
481	Air transportation (December 1992=100)	162.7	163.3	163.6	162.0	162.1	162.2	163.1	163.4
483	Water transportation	100.0	99.0	98.9	99.4	99.7	100.3	100.3	100.4
491	Postal service (June 1989=100)	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0
	Utilities								
221	Utilities	100.0	101.7	102.5	101.2	102.0	103.3	106.7	107.1
	Health care and social assistance								
6211	Office of physicians (December 1996=100)	112.8	114.1	114.3	114.3	114.3	114.2	114.4	114.5
6215	Medical and diagnostic laboratories	100.0	100.3	99.8	99.8	100.0	99.8	100.2	100.0
6216	Home health care services (December 1996=100)	119.0	119.5	119.6	119.6	119.7	119.7	119.7	119.9
622	Hospitals (December 1992=100)	137.6	139.5	140.1	140.3	140.3	140.7	140.8	142.3
6231	Nursing care facilities	100.0	101.2	101.4	101.6	101.6	101.6	101.3	102.1
62321	Residential mental retardation facilities	100.0	100.1	99.9	99.9	99.9	100.6	99.9	99.9
	Other services industries								
511	Publishing industries, except Internet	100.0	100.9	101.3	101.3	101.5	101.4	101.3	101.8
515	Broadcasting, except Internet	100.0	97.8	99.1	100.3	100.8	102.4	103.6	100.3
517	Telecommunications	100.0	100.4	100.0	100.2	100.2	99.9	100.0	99.7
5182	Data processing and related services	100.0	99.9	98.9	98.4	100.2	100.7	99.3	99.0
523	Security, commodity contracts, and like activity	100.0	101.8	102.0	101.7	101.8	102.3	102.9	102.5
53112	Lessors or nonresidental buildings (except miniwarehouse)	100.0	99.1	99.4	99.6	101.8	102.3	101.5	103.2
5312	Offices of real estate agents and brokers	100.0	100.0	100.2	100.7	100.9	100.9	100.9	101.1
5313	Real estate support activities	100.0	100.1	100.6	101.1	101.6	102.0	97.6	101.5
5321	Automotive equipment rental and leasing (June 2001=100)	109.1	107.9	109.8	107.4	105.4	104.4	105.2	109.7
5411	Legal services (December 1996=100)	126.5	131.4	131.7	131.7	131.9	131.8	131.8	132.0
541211	Offices of certified public accountants	100.0	100.8	100.7	100.8	101.2	101.3	101.1	101.3
5413	Architectural, engineering, and related services (December 1996=100)	125.3	125.7	125.9	126.5	126.6	126.3	126.4	126.9
54181	Advertising agencies	100.0	99.6	99.6	99.8	99.9	100.1	100.1	100.3
5613	Employment services (December 1996=100)	112.1	112.1	112.5	113.2	114.0	113.4	114.1	114.8
56151	Travel agencies	100.0	99.0	98.7	98.7	98.6	98.3	96.9	96.1
56172	Janitorial services	100.0	100.3	100.3	100.4	100.5	100.5	101.1	100.8
5621	Waste collection	100.0	100.8	101.3	100.8	101.9	101.9	101.8	101.3
721	Accommodation (December 1996=100)	120.5	122.2	123.6	124.9	124.0	125.0	124.0	128.6

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system.

42. Annual data: Producer Price Indexes, by stage of processing

[1982 = 100]

Index	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Finished goods											
Total	124.7	125.5	127.9	131.3	131.8	130.7	133.0	138.0	140.7	138.9	143.3
Foods	125.7	126.8	129.0	133.6	134.5	134.3	135.1	137.2	141.3	140.1	146.0
Energy	78.0	77.0	78.1	83.2	83.4	75.1	78.8	94.1	96.8	88.8	102.0
Other	135.8	137.1	140.0	142.0	142.4	143.7	146.1	148.0	150.0	150.2	150.5
Intermediate materials, supplies, and components											
Total	116.2	118.5	124.9	125.7	125.6	123.0	123.2	129.2	129.7	127.8	133.7
Foods	115.6	118.5	119.5	125.3	123.2	123.2	120.8	119.2	124.3	123.3	134.4
Energy	84.6	83.0	84.1	89.8	89.0	80.8	84.3	101.7	104.1	95.9	111.9
Other	123.8	127.1	135.2	134.0	134.2	133.5	133.1	136.6	136.4	135.8	138.5
Crude materials for further processing											
Total	102.4	101.8	102.7	113.8	111.1	96.8	98.2	120.6	121.3	108.1	135.3
Foods	108.4	106.5	105.8	121.5	112.2	103.9	98.7	100.2	106.2	99.5	113.5
Energy	76.7	72.1	69.4	85.0	87.3	68.6	78.5	122.1	122.8	102.0	147.5
Other	94.1	97.0	105.8	105.7	103.5	84.5	91.1	118.0	101.8	101.0	116.8

43. U.S. export price indexes by Standard International Trade Classification

[2000 = 100]

SITC Rev. 3	Industry	2003						2004						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
0	**Food and live animals**	107.1	107.6	112.1	112.2	115.2	116.5	117.0	119.9	122.7	126.1	126.7	124.1	120.7
01	Meat and meat preparations	104.6	108.9	117.2	123.5	125.6	123.0	122.8	125.0	127.1	127.6	127.7	127.3	122.8
04	Cereals and cereal preparations	115.4	115.7	124.2	119.4	125.6	130.8	131.6	135.2	139.6	147.7	146.0	141.3	128.6
05	Vegetables, fruit, and nuts, prepared fresh or dry	101.2	99.7	101.4	103.2	102.8	103.2	103.1	108.4	110.1	109.5	113.3	111.6	112.1
2	**Crude materials, inedible, except fuels**	103.9	102.3	106.2	111.2	116.3	116.9	120.2	122.3	129.0	132.8	132.4	125.4	129.5
22	Oilseeds and oleaginous fruits	124.8	109.2	121.1	136.7	150.9	152.5	157.2	160.9	181.6	197.1	199.0	168.5	184.5
24	Cork and wood	90.6	90.9	91.6	92.0	92.5	93.7	94.5	95.6	96.5	97.6	98.2	98.3	99.0
25	Pulp and waste paper	85.5	85.3	88.8	90.8	91.9	91.7	91.7	92.5	94.2	98.8	100.4	100.8	100.0
26	Textile fibers and their waste	106.2	107.0	109.6	121.4	128.5	121.2	123.7	122.2	121.9	115.9	114.9	108.7	101.5
28	Metalliferous ores and metal scrap	112.3	117.8	119.9	121.1	129.6	136.6	148.9	156.8	171.4	176.2	170.1	166.3	176.5
3	**Mineral fuels, lubricants, and related products**	109.8	114.9	108.7	108.2	106.3	110.7	120.5	119.3	123.0	123.2	135.1	130.3	136.2
32	Coal, coke, and briquettes	111.2	111.2	111.6	111.6	111.6	112.9	–	–	–	–	–	–	–
33	Petroleum, petroleum products, and related materials	105.9	113.0	104.2	104.1	101.2	106.2	116.8	114.7	120.1	119.8	135.0	127.7	133.2
5	**Chemicals and related products, n.e.s.**	99.6	100.0	100.3	100.7	100.9	101.4	102.9	104.0	104.9	105.5	105.6	105.8	106.8
54	Medicinal and pharmaceutical products	105.8	105.5	105.4	105.9	106.5	105.8	105.4	105.3	105.5	105.7	105.7	105.8	107.9
55	Essential oils; polishing and cleaning preparations	97.5	97.6	98.2	98.9	99.4	100.1	104.3	104.2	104.3	104.1	104.4	104.3	104.3
57	Plastics in primary forms	95.1	94.8	95.4	95.5	95.8	96.5	98.3	100.9	102.1	102.2	103.1	103.5	104.3
58	Plastics in nonprimary forms	98.4	98.4	98.2	98.3	97.1	97.2	96.8	97.2	97.4	96.9	96.7	96.4	97.3
59	Chemical materials and products, n.e.s.	102.0	101.9	101.9	102.4	102.5	102.6	105.0	105.2	104.8	104.8	104.8	104.8	104.6
6	**Manufactured goods classified chiefly by materials**	99.9	100.0	100.2	100.3	100.7	100.8	101.7	103.0	104.1	105.6	106.5	106.8	108.3
62	Rubber manufactures, n.e.s.	110.1	109.5	109.2	109.2	109.5	109.9	110.4	110.9	110.4	110.9	110.8	111.4	112.0
64	Paper, paperboard, and articles of paper, pulp, and paperboard	98.5	98.3	98.3	97.4	97.9	97.6	97.9	97.8	97.9	98.7	99.0	99.3	101.6
66	Nonmetallic mineral manufactures, n.e.s.	100.4	100.2	99.5	99.5	99.7	99.8	99.7	99.6	99.7	99.7	99.5	100.0	100.1
68	Nonferrous metals	79.8	80.9	81.6	81.9	83.4	84.5	85.9	90.9	94.1	98.1	97.6	95.4	95.4
7	**Machinery and transport equipment**	98.0	97.9	97.9	97.7	97.7	97.8	97.9	98.1	98.2	98.4	98.4	98.4	98.5
71	Power generating machinery and equipment	107.4	107.4	107.5	107.9	108.5	108.7	109.3	109.4	109.4	108.7	108.7	108.7	108.9
72	Machinery specialized for particular industries	103.2	103.2	103.1	103.1	103.3	103.4	103.9	104.0	104.2	105.1	105.5	105.5	105.6
74	General industrial machines and parts, n.e.s., and machine parts	102.5	102.5	102.6	102.6	102.8	102.8	103.3	103.5	104.0	104.5	104.8	105.0	105.4
75	Computer equipment and office machines	88.2	88.0	87.8	87.9	88.0	88.6	87.7	88.2	88.4	88.8	88.8	88.7	88.3
76	Telecommunications and sound recording and reproducing apparatus and equipment	93.4	93.4	93.3	92.8	92.2	92.0	92.6	92.5	92.4	92.2	92.0	91.9	91.8
77	Electrical machinery and equipment	89.8	89.8	89.4	88.6	88.2	88.1	88.0	88.3	88.6	88.5	88.5	88.3	88.3
78	Road vehicles	101.3	101.3	101.4	101.5	101.6	101.5	101.7	101.9	101.9	102.3	102.3	102.4	102.6
87	**Professional, scientific, and controlling instruments and apparatus**	102.4	102.3	102.2	102.1	102.3	102.3	102.2	102.3	102.3	102.2	102.1	102.0	101.8

44. U.S. import price indexes by Standard International Trade Classification

[2000 = 100]

SITC Rev. 3	Industry	2003						2004						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
0	**Food and live animals**	100.2	99.5	100.0	100.3	100.0	101.0	102.2	104.7	105.4	106.4	106.1	106.6	107.7
01	Meat and meat preparations	106.6	108.2	112.8	115.2	117.2	120.4	117.7	118.0	120.4	121.7	125.1	126.4	134.2
03	Fish and crustaceans, mollusks, and other aquatic invertebrates	83.5	82.3	82.2	79.8	79.3	79.2	78.2	80.0	83.3	85.1	84.0	84.1	86.0
05	Vegetables, fruit, and nuts, prepared fresh or dry	106.9	105.5	105.0	106.4	108.9	109.4	112.3	115.7	111.3	109.5	106.1	105.9	103.3
07	Coffee, tea, cocoa, spices, and manufactures thereof	95.3	96.6	98.6	95.5	93.1	96.0	100.1	101.9	101.7	103.6	102.4	107.1	102.7
1	**Beverages and tobacco**	104.1	104.0	104.0	104.3	104.4	104.4	104.7	105.0	105.3	105.3	105.4	105.3	105.3
11	Beverages	104.0	103.9	103.9	104.2	104.2	104.3	104.9	105.2	105.5	105.5	105.7	105.6	105.6
2	**Crude materials, inedible, except fuels**	100.7	100.5	106.1	104.2	104.5	107.9	109.5	114.1	120.0	122.9	127.3	125.8	125.7
24	Cork and wood	100.1	99.3	113.0	106.2	103.2	108.0	108.9	115.7	123.3	127.8	139.0	136.1	132.1
25	Pulp and waste paper	93.6	91.9	90.4	90.8	91.9	92.8	93.3	91.9	95.4	100.8	103.4	106.5	108.0
28	Metalliferous ores and metal scrap	100.3	102.9	103.7	104.3	108.7	115.3	124.2	134.6	148.0	148.2	143.5	140.4	144.4
29	Crude animal and vegetable materials, n.e.s.	99.4	96.8	95.7	95.1	94.8	99.6	98.9	99.5	99.7	99.3	102.1	98.0	101.2
3	**Mineral fuels, lubricants, and related products**	106.0	106.5	101.5	101.3	103.3	108.2	117.3	117.7	120.8	121.1	131.7	132.0	132.7
33	Petroleum, petroleum products, and related materials	103.4	105.6	99.4	100.1	102.3	106.9	114.0	114.5	120.0	120.3	131.6	130.5	131.7
34	Gas, natural and manufactured	121.5	108.8	114.4	106.2	106.6	113.9	138.0	137.1	122.9	123.3	129.5	140.0	137.3
5	**Chemicals and related products, n.e.s.**	100.0	99.2	99.2	100.2	100.8	101.1	103.0	103.4	103.8	103.5	103.4	103.8	105.6
52	Inorganic chemicals	105.4	106.0	105.4	108.8	111.9	114.0	119.3	120.6	120.5	115.9	117.2	119.3	126.7
53	Dying, tanning, and coloring materials	98.0	98.3	97.7	98.1	99.0	99.6	99.9	99.7	99.5	100.6	100.8	101.0	101.2
54	Medicinal and pharmaceutical products	103.1	102.5	101.9	102.3	103.4	103.4	107.2	107.7	108.1	107.7	107.3	107.2	108.1
55	Essential oils; polishing and cleaning preparations	99.0	91.8	91.6	91.2	91.6	91.6	92.7	93.3	93.7	93.5	93.4	93.5	93.6
57	Plastics in primary forms	104.3	103.1	102.7	105.6	105.6	105.5	104.4	105.2	106.9	105.5	105.8	104.6	108.1
58	Plastics in nonprimary forms	101.3	101.4	101.4	101.7	101.7	101.8	102.1	102.4	102.9	102.9	102.8	102.1	102.7
59	Chemical materials and products, n.e.s.	93.3	91.9	91.8	92.3	93.1	93.3	94.3	94.9	95.8	95.4	95.1	95.2	95.6
6	**Manufactured goods classified chiefly by materials**	94.9	95.4	95.7	96.5	97.4	97.8	98.9	101.4	103.6	105.6	106.9	106.1	106.1
62	Rubber manufactures, n.e.s.	98.6	98.5	98.5	98.5	98.6	98.8	99.0	99.2	99.7	99.9	100.0	100.1	100.0
64	Paper, paperboard, and articles of paper, pulp, and paperboard	93.2	94.9	94.5	94.7	94.2	93.7	94.1	94.5	95.0	94.8	95.5	95.6	96.3
66	Nonmetallic mineral manufactures, n.e.s.	97.9	97.8	97.8	97.9	98.1	98.1	98.5	98.9	99.0	99.3	99.4	99.6	99.8
68	Nonferrous metals	78.0	79.1	80.7	82.0	85.1	87.7	92.3	97.0	102.6	105.8	106.1	101.8	101.9
69	Manufactures of metals, n.e.s.	98.2	98.4	98.5	98.7	99.1	99.5	99.7	100.3	101.1	102.3	102.3	102.3	102.6
7	**Machinery and transport equipment**	95.7	95.6	95.5	95.3	95.4	95.3	95.4	95.5	95.5	95.2	95.2	95.1	95.0
72	Machinery specialized for particular industries	102.6	102.5	102.2	102.4	103.3	103.6	104.9	106.4	106.7	106.5	106.6	106.4	107.3
74	General industrial machines and parts, n.e.s., and machine parts	100.8	100.4	100.2	100.4	100.9	101.2	101.8	102.5	103.3	103.5	103.6	103.5	104.5
75	Computer equipment and office machines	80.6	80.6	80.5	78.6	78.5	78.2	78.0	78.0	77.7	76.5	76.4	75.4	74.9
76	Telecommunications and sound recording and reproducing apparatus and equipment	88.7	88.8	88.6	87.7	87.5	86.7	86.4	85.4	85.1	84.9	84.9	84.8	84.5
77	Electrical machinery and equipment	96.1	96.0	96.0	95.9	96.0	95.3	95.4	95.7	95.6	94.9	94.9	94.8	94.4
78	Road vehicles	100.7	100.7	100.6	101.3	101.4	101.6	101.9	102.0	102.0	102.2	102.3	102.4	102.5
85	Footwear	99.9	99.8	99.9	100.0	100.1	100.1	100.5	100.5	100.6	100.6	100.6	100.4	100.4
88	Photographic apparatus, equipment, and supplies, and optical goods, n.e.s.	100.1	99.6	99.2	99.3	99.8	99.9	99.9	100.3	100.0	99.4	99.3	99.0	98.0

45. U.S. export price indexes by end-use category

[2000 = 100]

Category	2003						2004						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
ALL COMMODITIES	99.4	99.4	99.8	100.0	100.5	100.8	101.5	102.2	103.0	103.7	104.1	103.4	103.8
Foods, feeds, and beverages	110.8	109.4	115.3	117.2	121.4	122.4	123.1	125.6	130.5	134.8	135.6	129.3	128.3
Agricultural foods, feeds, and beverages	111.0	109.5	116.3	118.4	122.8	123.8	124.6	127.2	132.4	137.0	138.0	131.2	130.1
Nonagricultural (fish, beverages) food products	109.3	109.5	106.5	105.6	107.5	108.5	109.5	110.7	112.1	113.4	112.6	111.2	111.3
Industrial supplies and materials	99.6	100.0	100.2	101.0	101.7	102.5	105.1	106.4	108.1	109.1	110.2	109.5	111.0
Agricultural industrial supplies and materials	104.7	105.5	107.3	113.3	119.0	117.5	118.6	116.6	117.2	114.8	113.7	110.7	108.2
Fuels and lubricants	97.0	100.4	97.6	97.5	96.4	99.0	106.1	106.5	108.9	109.6	117.5	114.1	117.5
Nonagricultural supplies and materials, excluding fuel and building materials	100.0	100.1	100.5	101.1	101.7	102.5	104.7	106.4	108.1	109.4	109.8	109.6	111.3
Selected building materials	97.5	98.0	98.4	98.8	99.1	99.5	98.7	100.9	102.3	103.4	103.9	103.4	102.8
Capital goods	97.7	97.7	97.5	97.3	97.3	97.5	97.5	97.8	98.0	98.1	98.1	98.1	98.2
Electric and electrical generating equipment	101.8	101.6	101.7	101.7	101.7	101.7	102.0	101.9	102.0	101.7	101.6	101.9	102.1
Nonelectrical machinery	94.6	94.5	94.3	93.9	93.9	94.1	93.9	94.3	94.5	94.6	94.7	94.5	94.5
Automotive vehicles, parts, and engines	101.8	101.8	101.8	101.9	101.9	101.8	101.9	102.0	101.9	102.2	102.3	102.3	102.5
Consumer goods, excluding automotive	99.6	99.4	99.4	99.8	100.0	99.9	100.2	100.1	100.2	100.4	100.5	100.4	100.9
Nondurables, manufactured	98.8	98.7	98.5	99.0	99.4	99.2	99.9	99.9	99.9	100.1	100.1	99.9	100.8
Durables, manufactured	100.2	99.9	100.1	100.3	100.3	100.3	100.1	100.0	100.1	100.5	100.6	100.6	100.9
Agricultural commodities	109.9	108.8	114.7	117.5	122.2	122.7	123.5	125.3	129.7	133.0	133.7	127.5	126.2
Nonagricultural commodities	98.6	98.7	98.6	98.7	98.8	99.1	99.8	100.4	100.9	101.4	101.7	101.5	102.1

46. U.S. import price indexes by end-use category

[2000 = 100]

Category	2003						2004						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
ALL COMMODITIES	96.7	96.7	96.2	96.3	96.8	97.5	99.0	99.4	100.2	100.4	101.9	101.8	102.0
Foods, feeds, and beverages	101.5	101.3	101.8	101.9	102.4	103.2	103.7	105.3	105.9	107.2	106.9	106.9	107.5
Agricultural foods, feeds, and beverages	107.7	107.6	108.3	109.0	109.7	110.9	112.0	113.4	113.0	114.2	114.1	114.2	114.2
Nonagricultural (fish, beverages) food products	88.0	87.4	87.6	86.3	86.0	86.0	85.1	87.2	90.1	91.7	90.7	90.5	92.5
Industrial supplies and materials	100.2	100.5	98.9	99.5	100.7	103.6	108.5	110.0	112.7	113.9	119.7	119.5	120.1
Fuels and lubricants	103.9	104.2	99.4	100.1	102.0	107.2	116.5	117.0	120.2	120.6	131.0	131.3	132.0
Petroleum and petroleum products	101.4	103.2	97.2	98.8	100.9	106.0	113.7	114.3	120.1	119.9	131.3	130.1	131.3
Paper and paper base stocks	93.6	94.7	94.0	94.0	93.9	93.9	94.1	94.2	95.6	96.8	98.2	99.0	99.8
Materials associated with nondurable supplies and materials	102.9	102.3	102.5	103.4	104.2	104.4	104.7	104.8	105.4	105.1	105.3	106.0	107.6
Selected building materials	101.8	102.7	110.3	109.5	108.1	108.0	106.8	113.7	118.4	120.2	123.6	120.4	117.2
Unfinished metals associated with durable goods	92.2	92.9	93.4	94.4	96.4	99.2	104.5	109.5	114.9	121.7	126.2	124.5	126.2
Nonmetals associated with durable goods	97.9	97.3	97.5	97.7	98.1	98.2	98.5	99.2	99.3	99.3	99.0	98.7	97.9
Capital goods	93.8	93.6	93.5	93.0	93.3	92.9	93.1	93.1	93.1	92.6	92.6	92.3	92.2
Electric and electrical generating equipment	96.8	96.6	95.8	96.2	96.5	96.8	97.4	97.9	97.8	97.2	97.2	97.1	97.6
Nonelectrical machinery	92.3	92.1	92.1	91.4	91.6	91.1	91.2	91.2	91.2	90.6	90.5	90.1	90.0
Automotive vehicles, parts, and engines	100.6	100.6	100.5	101.2	101.2	101.4	101.6	101.7	101.8	102.0	102.0	102.2	102.3
Consumer goods, excluding automotive	98.1	97.9	97.9	97.9	98.1	98.1	98.6	98.7	98.7	98.6	98.5	98.5	98.5
Nondurables, manufactured	99.9	99.8	99.7	99.8	100.0	100.1	101.1	101.2	101.3	101.1	101.0	100.9	101.2
Durables, manufactured	96.3	96.2	96.2	96.1	96.2	96.2	96.3	96.3	96.3	96.3	96.0	96.1	95.9
Nonmanufactured consumer goods	95.7	95.6	95.7	95.8	95.8	96.2	95.9	96.2	96.4	96.4	97.3	96.8	97.4

47. U.S. international price indexes for selected categories of services

[2000 = 100, unless indicated otherwise]

Category	2002				2003				2004	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
Air freight (inbound)	93.9	98.3	100.3	105.9	108.8	109.4	112.5	112.9	116.2	116.5
Air freight (outbound)	95.9	98.4	97.3	95.4	97.2	95.4	95.5	94.9	96.1	98.9
Inbound air passenger fares (Dec. 2003 = 100)	–	–	–	–	–	–	–	100.0	105.1	106.1
Outbound air passenger fares (Dec. 2003 = 100))	–	–	–	–	–	–	–	100.0	99.3	114.2
Ocean liner freight (inbound)	91.7	90.3	93.5	93.3	94.0	116.1	116.2	117.7	119.1	121.1

NOTE: Dash indicates data not available.

48. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted

[1992 = 100]

Item	2001			2002				2003				2004	
	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Business													
Output per hour of all persons	118.4	118.8	120.9	122.7	123.2	124.7	125.0	126.2	128.6	131.2	132.0	133.3	133.8
Compensation per hour	139.7	140.4	141.5	143.2	144.4	145.0	145.5	4.5147.4	149.6	151.7	153.2	154.2	155.6
Real compensation per hour	112.8	113.2	114.2	115.2	115.2	115.0	114.8	115.3	116.8	117.7	118.7	118.4	118.1
Unit labor costs	117.9	118.2	117.0	116.7	117.2	116.3	116.3	116.8	116.4	115.6	116.0	115.7	116.3
Unit nonlabor payments	109.9	110.2	113.1	113.4	113.6	115.7	116.8	117.7	119.0	120.8	120.7	122.9	124.4
Implicit price deflator	114.9	115.2	115.6	115.5	115.9	116.1	116.5	117.1	117.3	117.5	117.8	118.4	119.4
Nonfarm business													
Output per hour of all persons	118.1	118.5	120.4	122.4	122.8	124.1	124.6	125.8	127.8	130.6	131.7	132.8	133.7
Compensation per hour	138.9	139.6	140.7	142.6	143.8	144.3	144.7	146.6	148.7	150.9	152.5	153.3	154.9
Real compensation per hour	112.2	112.5	113.5	114.7	114.7	114.4	114.3	114.7	116.1	117.1	118.2	117.7	117.6
Unit labor costs	117.6	117.8	116.8	116.4	117.1	116.2	116.1	116.6	6.5116.3	115.5	115.9	115.4	115.9
Unit nonlabor payments	111.6	111.9	114.7	115.1	115.4	117.7	118.9	119.6	120.4	122.3	121.9	124.3	125.7
Implicit price deflator	115.4	115.6	116.0	116.0	116.5	116.8	117.2	117.7	117.8	118.0	118.1	118.7	119.5
Nonfinancial corporations													
Output per hour of all employees	122.8	123.0	123.9	126.3	127.9	129.2	130.2	131.3	134.1	137.2	138.9	138.9	139.4
Compensation per hour	136.7	137.9	139.3	139.9	141.3	142.1	142.9	144.1	146.3	148.5	150.0	150.9	152.4
Real compensation per hour	110.4	111.1	112.5	112.6	112.7	112.7	112.8	112.7	114.2	115.3	116.2	115.9	115.7
Total unit costs	111.6	112.8	113.4	111.6	111.2	110.7	110.4	110.7	109.7	109.0	108.7	108.8	109.5
Unit labor costs	111.4	112.1	112.4	1,110.8	110.5	110.0	109.7	109.8	109.1	108.2	108.0	108.6	109.3
Unit nonlabor costs	112.2	114.7	116.2	114.0	112.9	112.7	112.3	113.2	111.4	111.1	110.5	109.5	109.9
Unit profits	87.3	79.4	75.8	89.1	94.7	95.7	101.8	99.2	111.0	118.7	123.2	128.1	133.1
Unit nonlabor payments	105.6	105.2	105.4	107.4	108.1	108.2	109.5	109.4	111.3	113.1	113.9	114.5	116.1
Implicit price deflator	109.4	109.8	110.1	109.6	109.7	109.4	109.6	109.7	109.8	109.9	110.0	110.6	111.6
Manufacturing													
Output per hour of all persons	135.8	136.9	140.4	143.8	145.7	147.8	148.8	151.0	152.1	155.9	157.2	158.3	160.9
Compensation per hour	137.4	137.3	139.4	144.1	147.0	148.6	149.9	155.7	158.5	161.6	163.9	162.2	163.5
Real compensation per hour	111.0	110.6	112.5	115.9	117.2	117.8	118.3	121.8	123.8	125.4	127.0	124.6	124.1
Unit labor costs	101.2	100.3	99.3	100.2	100.8	100.5	100.7	103.1	104.2	103.6	104.2	102.5	101.6

49. Annual indexes of multifactor productivity and related measures, selected years

[1996 = 100]

Item	1980	1990	1991	1992	1993	1994	1995	1997	1998	1999	2000	2001
Private business												
Productivity:												
Output per hour of all persons	75.8	90.2	91.3	94.8	95.4	96.6	97.3	102.2	105.0	107.7	111.0	112.4
Output per unit of capital services	103.3	99.7	96.5	98.0	98.7	100.4	99.8	100.3	99.3	98.2	96.6	92.8
Multifactor productivity	88.8	95.5	94.5	96.7	97.1	98.2	98.4	101.2	102.5	103.4	105.0	103.9
Output	59.4	83.6	82.6	85.7	88.5	92.8	95.8	105.2	110.5	115.7	120.4	120.2
Inputs:												
Labor input	71.9	89.4	88.3	89.3	91.8	95.6	98.0	103.5	106.1	109.0	110.1	109.5
Capital services	57.6	83.8	85.7	87.5	89.7	92.5	96.0	104.9	111.3	117.9	124.5	129.6
Combined units of labor and capital input	67.0	87.5	87.4	88.7	91.1	94.6	97.3	104.0	107.9	110.9	114.7	115.7
Capital per hour of all persons	73.4	90.4	94.6	96.8	96.6	96.2	97.5	101.9	105.8	109.7	114.8	121.1
Private nonfarm business												
Productivity:												
Output per hour of all persons	77.3	90.3	91.4	94.8	95.3	96.5	97.5	102.0	104.7	107.1	110.3	111.6
Output per unit of capital services	107.6	100.4	97.0	98.2	99.0	100.4	100.0	100.0	99.0	97.6	95.9	92.0
Multifactor productivity	91.0	95.8	94.8	96.7	97.2	98.2	98.6	101.0	102.2	102.9	104.4	103.3
Output	59.6	83.5	82.5	85.5	88.4	92.6	95.8	105.1	110.5	115.7	120.2	120.1
Inputs:												
Labor input	70.7	89.2	87.9	89.0	91.8	95.4	97.8	103.6	106.4	109.5	110.6	110.1
Capital services	55.4	83.2	85.1	87.0	89.4	92.2	95.8	105.1	111.7	118.5	125.4	130.5
Combined units of labor and capital input	65.5	87.2	87.0	88.4	91.0	94.3	97.2	104.1	108.1	112.4	115.2	116.3
Capital per hour of all persons	71.8	89.9	94.3	96.5	96.3	96.1	97.6	101.9	105.8	109.7	115.0	121.3
Manufacturing												
Productivity:												
Output per hour of all persons	62.0	82.2	84.1	88.6	90.2	93.0	96.5	103.8	108.9	114.0	118.3	119.7
Output per unit of capital services	97.2	97.5	93.6	95.9	96.9	99.7	100.6	101.4	101.7	101.7	101.0	95.1
Multifactor productivity	81.2	93.3	92.4	94.0	95.1	97.3	99.2	103.1	105.7	108.7	111.3	110.3
Output	64.3	83.2	81.5	85.5	88.3	92.9	96.9	105.6	110.5	114.7	117.4	112.1
Inputs:												
Hours of all persons	103.7	101.1	96.9	96.5	97.8	99.9	100.4	101.7	101.5	100.7	99.2	99.6
Capital services	66.1	85.3	87.1	89.1	91.1	93.2	96.4	104.1	108.7	112.8	116.2	117.9
Energy	86.1	93.1	93.2	93.1	96.6	99.9	102.3	97.5	100.6	102.9	104.3	98.9
Nonenergy materials	63.9	77.5	78.5	83.5	86.5	90.3	93.1	101.9	107.5	107.9	106.9	105.5
Purchased business services	65.8	84.7	84.6	92.0	92.9	96.0	100.4	103.9	103.1	105.4	106.5	97.7
Combined units of all factor inputs	79.2	89.1	88.3	90.9	92.8	95.5	97.7	102.4	104.6	105.5	105.5	101.6

50. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

[1992 = 100]

Item	1960	1970	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Business													
Output per hour of all persons	48.7	66.0	79.0	94.4	101.7	104.5	106.5	109.3	112.4	115.7	118.3	124.0	129.6
Compensation per hour	13.8	23.5	54.0	90.5	106.0	109.5	113.0	119.7	125.4	134.2	139.7	147.8	147.9
Real compensation per hour	60.5	78.4	88.9	96.1	98.9	99.5	100.5	105.0	107.8	111.6	113.0	113.7	115.1
Unit labor costs	28.4	35.6	68.4	95.9	104.3	104.8	106.1	109.5	111.6	116.0	118.1	115.2	114.1
Unit nonlabor payments	24.9	31.5	61.3	93.9	108.2	111.9	113.9	109.9	109.2	107.2	109.5	117.0	123.0
Implicit price deflator	27.1	34.1	65.8	95.1	105.7	107.4	109.0	109.7	110.7	112.7	114.9	115.8	117.4
Nonfarm business													
Output per hour of all persons	51.6	67.7	80.3	94.4	102.1	104.7	106.4	109.2	112.2	115.3	117.8	123.6	129.1
Compensation per hour	14.4	23.6	54.2	90.3	106.0	109.4	112.8	119.4	124.9	133.7	138.9	142.1	147.0
Real compensation per hour	63.0	78.8	89.2	95.9	98.9	99.4	100.3	104.7	107.3	111.2	112.4	113.2	114.4
Unit labor costs	27.9	34.9	67.5	95.6	103.8	104.5	106.0	109.3	111.3	116.0	118.0	115.0	113.9
Unit nonlabor payments	24.3	31.1	60.4	93.6	109.2	112.1	114.6	110.9	110.8	108.8	111.1	119.0	124.8
Implicit price deflator	26.6	33.5	64.9	94.9	105.8	107.3	109.1	109.9	111.1	113.3	115.4	116.4	117.9
Nonfinancial corporations													
Output per hour of all employees	56.6	70.4	81.0	95.5	103.4	107.1	109.8	112.8	116.4	120.6	122.7	128.9	136.3
Compensation per hour	16.1	25.6	57.0	91.0	105.4	108.4	111.7	117.9	123.3	131.7	137.0	140.1	145.9
Real compensation per hour	70.3	85.3	93.8	96.7	98.3	98.5	99.3	103.4	105.9	109.5	110.8	111.5	113.5
Total unit costs	26.9	35.1	68.8	95.4	101.8	100.9	101.2	103.2	104.6	108.0	111.2	109.4	107.4
Unit labor costs	28.4	36.3	70.4	95.3	102.0	101.2	101.7	104.5	106.0	109.2	111.6	108.6	107.0
Unit nonlabor costs	23.0	31.7	64.5	97.1	101.3	99.9	99.8	99.9	101.0	104.8	110.2	111.5	108.4
Unit profits	49.5	43.7	66.5	96.7	136.9	149.9	154.4	137.5	129.8	109.3	91.4	111.4	134.2
Unit nonlabor payments	30.1	34.9	65.1	97.0	110.8	113.3	114.4	109.9	108.7	106.1	105.2	111.5	115.3
Implicit price deflator	28.9	35.9	68.6	95.9	104.9	105.3	105.9	106.3	106.9	108.1	109.5	109.6	109.8
Manufacturing													
Output per hour of all persons	41.8	54.2	70.1	92.9	110.1	113.9	117.9	123.5	128.2	134.2	137.1	147.1	154.6
Compensation per hour	14.9	23.7	55.6	90.1	107.7	109.9	112.0	118.8	123.8	135.0	138.3	143. 8	151.9
Real compensation per hour	65.0	79.2	91.4	95.7	100.5	99.8	99.7	104.2	106.3	112.3	111.8	114.5	118.2
Unit labor costs	35.6	43.8	79.3	97.0	97.8	96.5	95.0	96.2	96.6	100.6	100.8	97.8	98.2
Unit nonlabor payments	26.8	29.3	80.2	101.1	107.6	110.4	110.5	104.1	105.0	107.0	105.8	–	–
Implicit price deflator	30.2	35.0	79.9	99.5	103.9	105.2	104.6	101.1	101.8	104.6	103.9	–	–

Dash indicates data not available.

51. Annual indexes of output per hour for selected NAICS industries, 1990-2002

[1997=100]

NAICS	Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Mining													
21	Mining	86.0	86.8	95.2	96.2	99.6	101.8	101.7	100.0	103.4	111.1	109.5	107.7	112.3
211	Oil and gas extraction	78.4	78.8	81.9	85.1	90.3	95.5	98.9	100.0	101.6	107.9	115.2	117.4	119.3
212	Mining, except oil and gas	79.3	80.0	86.8	89.9	93.0	94.0	96.0	100.0	104.6	105.9	106.8	109.0	111.7
2121	Coal mining	68.1	69.3	75.3	79.9	83.9	88.2	94.9	100.0	106.5	110.3	115.8	114.4	112.2
2122	Metal ore mining	79.9	82.7	91.7	102.2	104.1	98.5	95.3	100.0	109.5	112.7	124.4	131.8	143.9
2123	Nonmetallic mineral mining and quarrying	92.3	89.5	96.1	93.6	96.9	97.3	97.1	100.0	101.3	101.2	96.2	99.3	103.8
	Utilities													
2211	Power generation and supply	71.2	73.8	74.2	78.7	83.0	88.6	95.5	100.0	103.8	104.1	107.0	106.4	102.4
2212	Natural gas distribution	71.4	72.7	75.8	79.8	82.1	89.0	96.1	100.0	99.1	103.1	113.1	110.0	114.9
	Manufacturing													
3111	Animal food	90.1	89.3	90.2	90.2	87.3	94.0	87.5	100.0	109.4	109.5	109.7	127.2	–
3112	Grain and oilseed milling	89.0	91.2	91.1	93.8	94.7	99.1	91.3	100.0	107.5	114.2	112.5	117.3	–
3113	Sugar and confectionery products	91.0	93.8	90.5	92.5	94.0	94.3	98.2	100.0	104.0	107.1	111.9	109.9	–
3114	Fruit and vegetable preserving and specialty	86.4	89.7	90.7	93.8	94.9	97.1	98.2	100.0	106.8	108.4	109.8	117.0	–
3115	Dairy products	90.8	92.1	95.4	93.9	95.4	98.7	98.0	100.0	99.1	94.5	96.0	96.2	–
3116	Animal slaughtering and processing	94.5	96.8	101.5	100.9	97.4	98.5	94.3	100.0	99.9	100.3	101.9	102.7	–
3117	Seafood product preparation and packaging	117.5	112.0	115.3	113.9	114.1	108.4	116.2	100.0	117.0	130.2	137.6	147.3	–
3118	Bakeries and tortilla manufacturing	92.6	92.3	95.6	96.0	96.7	99.7	97.7	100.0	103.8	105.4	105.3	106.3	–
3119	Other food products	91.9	93.5	95.9	102.8	100.3	101.3	103.0	100.0	106.9	108.8	110.2	103.2	–
3121	Beverages	86.5	90.1	93.8	93.2	97.7	99.6	101.1	100.0	98.5	92.4	90.6	91.7	–
3122	Tobacco and tobacco products	81.4	77.3	79.6	73.7	89.8	97.5	99.4	100.0	98.1	92.1	98.0	100.0	–
3131	Fiber, yarn, and thread mills	73.9	74.7	80.1	84.6	87.2	92.0	98.7	100.0	102.2	104.6	102.6	110.5	–
3132	Fabric mills	75.0	77.7	81.5	85.0	91.9	95.8	98.0	100.0	103.9	109.8	110.2	109.1	–
3133	Textile and fabric finishing mills	81.7	80.4	83.7	86.0	87.8	84.5	85.0	100.0	100.6	101.7	104.0	109.7	–
3141	Textile furnishings mills	88.2	88.6	93.0	93.7	90.1	92.5	93.3	100.0	99.9	101.2	106.8	106.9	–
3149	Other textile product millsv	91.1	90.0	92.0	90.3	94.5	95.9	96.3	100.0	97.0	110.4	110.4	105.0	–
3151	Apparel knitting mills	85.6	88.7	93.2	102.5	104.3	109.5	121.9	100.0	96.6	102.0	110.2	108.4	–
3152	Cut and sew apparel	70.1	72.0	73.1	76.6	80.5	85.5	90.5	100.0	104.0	118.8	127.7	131.7	–
3159	Accessories and other apparel	100.9	97.3	98.7	99.0	104.6	112.4	112.6	100.0	110.8	103.3	104.9	114.8	–
3161	Leather and hide tanning and finishing	60.8	56.6	76.7	83.1	75.9	78.6	91.5	100.0	98.0	101.6	110.0	109.7	–
3162	Footwear	77.1	74.7	83.1	81.7	90.4	95.6	103.4	100.0	100.9	116.8	124.1	142.7	–
3169	Other leather products	102.5	100.2	97.0	94.3	80.0	73.2	79.7	100.0	109.2	100.4	107.6	114.1	–
3211	Sawmills and wood preservation	79.2	81.6	86.1	82.6	85.1	91.0	96.2	100.0	100.8	105.4	106.5	109.0	–
3212	Plywood and engineered wood products	102.3	107.4	114.7	108.9	105.8	101.8	101.2	100.0	105.6	99.9	100.5	105.0	–
3219	Other wood products	105.4	104.7	104.0	103.0	99.3	100.4	100.8	100.0	101.5	105.4	104.0	104.6	–
3221	Pulp, paper, and paperboard mills	88.5	88.1	92.3	92.9	97.6	102.0	97.6	100.0	103.1	111.4	115.7	117.5	–
3222	Converted paper products	90.5	93.5	93.7	96.3	97.6	97.2	98.3	100.0	102.7	101.5	101.9	101.0	–
3231	Printing and related support activities	96.6	95.4	101.3	100.1	98.3	98.8	99.6	100.0	100.5	103.5	104.9	105.6	–
3241	Petroleum and coal products	76.7	75.8	78.9	84.5	85.6	90.1	94.8	100.0	102.1	107.8	113.2	112.2	–
3251	Basic chemicals	91.4	90.1	89.4	89.9	95.1	92.3	90.0	100.0	102.5	114.7	118.4	111.0	–
3252	Resin, rubber, and artificial fibers	75.8	74.7	80.6	83.8	93.5	95.9	93.3	100.0	105.5	108.8	108.1	103.8	–
3253	Agricultural chemicals	84.6	81.0	81.3	85.6	87.4	90.7	92.1	100.0	98.8	87.6	91.4	91.1	–
3254	Pharmaceuticals and medicines	91.4	92.6	88.2	88.1	92.4	96.3	99.9	100.0	92.9	94.6	93.4	97.4	–
3255	Paints, coatings, and adhesives	85.1	85.9	87.6	90.9	94.1	92.7	98.3	100.0	99.1	98.8	98.5	102.1	–
3256	Soap, cleaning compounds, and toiletries	83.2	84.2	83.4	86.9	88.6	93.9	95.6	100.0	96.6	91.1	99.2	102.7	–
3259	Other chemical products and preparations	76.6	78.0	84.7	90.6	92.6	94.4	94.2	100.0	99.4	109.2	120.0	111.3	–
3261	Plastics products	84.7	86.3	90.3	91.9	94.4	94.5	97.0	100.0	103.5	109.3	111.2	113.3	–
3262	Rubber products	83.0	83.8	84.9	90.4	90.3	92.8	94.4	100.0	100.5	101.4	103.9	104.2	–
3271	Clay products and refractories	89.2	87.5	91.5	91.9	96.6	97.4	102.6	100.0	101.3	103.5	103.6	97.6	–
3272	Glass and glass products	80.0	79.1	84.3	86.1	87.5	88.8	96.5	100.0	102.7	108.6	109.7	105.2	–
3273	Cement and concrete products	94.8	93.7	94.8	96.5	95.0	98.2	100.6	100.0	103.5	104.1	100.4	97.1	–
3274	Lime and gypsum products	84.1	82.7	88.5	90.1	87.8	88.8	92.4	100.0	113.1	102.7	97.0	100.1	–
3279	Other nonmetallic mineral products	79.8	81.4	90.2	89.3	90.5	91.7	96.5	100.0	98.8	95.5	95.6	96.8	–
3311	Iron and steel mills and ferroalloy production	69.6	67.2	74.1	81.7	87.2	89.7	94.1	100.0	101.7	106.5	108.5	106.7	–
3312	Steel products from purchased steel	83.8	86.4	89.9	95.9	100.0	100.5	100.5	100.0	100.3	94.2	96.4	97.1	–
3313	Alumina and aluminum production	91.9	93.3	96.8	96.0	100.3	96.8	95.9	100.0	101.1	104.3	97.8	96.9	–
3314	Other nonferrous metal production	95.6	95.8	98.8	101.8	105.1	102.9	105.7	100.0	111.2	108.9	103.1	100.5	–
3315	Foundries	85.3	84.5	85.8	89.8	91.4	93.1	96.2	100.0	101.6	104.9	104.0	109.3	–
3321	Forging and stamping	88.6	86.5	91.7	94.6	93.7	94.2	97.6	100.0	103.7	110.9	121.3	121.8	–
3322	Cutlery and hand tools	85.1	85.4	87.2	91.7	94.4	97.8	104.4	100.0	100.0	107.8	105.8	110.2	–
3323	Architectural and structural metals	87.8	89.1	92.5	93.4	95.1	93.9	94.2	100.0	101.1	101.8	101.0	100.7	–
3324	Boilers, tanks, and shipping containers	90.4	92.6	95.3	94.8	100.5	97.8	100.7	100.0	101.3	98.9	97.7	98.2	–
3325	Hardware	84.4	83.8	86.9	89.6	95.7	97.3	102.6	100.0	101.0	106.5	115.8	114.6	–
3326	Spring and wire products	85.2	88.4	90.9	95.3	91.5	99.5	102.8	100.0	111.6	112.9	114.6	110.6	–
3327	Machine shops and threaded products	78.8	79.8	87.2	86.9	91.6	98.7	100.0	100.0	99.3	103.9	107.2	107.2	–

51. Continued—Annual indexes of output per hour for selected NAICS industries, 1990-2002

[1997=100]

NAICS	Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
3328	Coating, engraving, and heat treating metals	81.6	78.1	86.9	91.9	96.5	102.8	102.9	100.0	101.7	101.5	105.9	105.1	-
3329	Other fabricated metal products	86.7	85.9	90.6	92.1	95.0	97.1	98.9	100.0	102.3	100.2	100.8	98.2	-
3331	Agriculture, construction, and mining machinery	82.8	77.2	79.6	84.1	91.0	95.6	95.9	100.0	104.2	95.0	101.0	99.5	-
3332	Industrial machinery	80.6	81.1	79.5	84.9	90.0	97.9	98.8	100.0	94.4	105.2	129.7	104.6	-
3333	Commercial and service industry machinery	91.4	89.6	96.5	101.7	101.2	103.0	106.3	100.0	107.5	111.2	101.4	94.4	-
3334	HVAC and commercial refrigeration equipment	88.8	88.2	90.8	93.8	97.3	96.6	97.8	100.0	106.6	110.4	108.3	110.8	-
3335	Metalworking machinery	85.3	82.3	89.3	89.3	94.0	99.1	98.1	100.0	99.1	100.5	106.4	102.0	-
3336	Turbine and power transmission equipment	85.1	84.6	81.2	84.8	93.3	92.1	97.9	100.0	106.4	113.3	117.1	130.2	-
3339	Other general purpose machinery	85.9	85.2	85.1	89.8	91.5	94.6	95.1	100.0	103.2	105.6	113.0	109.4	-
3341	Computer and peripheral equipment	14.3	15.8	20.6	27.9	35.9	51.3	72.6	100.0	138.6	190.3	225.4	237.0	-
3342	Communications equipment	47.3	49.3	59.3	62.1	70.1	74.6	84.3	100.0	102.7	134.0	165.5	155.2	-
3343	Audio and video equipment	75.5	82.8	92.1	98.8	108.5	140.0	104.7	100.0	103.1	116.2	123.3	126.3	-
3344	Semiconductors and electronic components	21.4	24.5	29.6	34.1	43.1	63.4	81.8	100.0	125.2	174.5	233.3	231.6	-
3345	Electronic instruments	76.0	80.5	83.1	85.8	88.8	96.8	97.7	100.0	101.3	105.1	114.3	116.1	-
3346	Magnetic media manufacturing and reproduction	86.6	91.2	93.0	96.8	106.1	106.7	103.8	100.0	105.4	106.8	104.0	98.6	-
3351	Electric lighting equipment	87.3	88.5	93.6	90.8	94.5	92.2	95.6	100.0	103.8	102.5	101.9	105.4	-
3352	Household appliances	76.4	76.4	82.4	88.9	95.0	92.7	93.1	100.0	105.1	104.3	117.5	122.6	-
3353	Electrical equipment	73.6	72.7	78.9	85.8	89.0	98.1	100.2	100.0	99.8	98.9	100.6	101.0	-
3359	Other electrical equipment and components	75.3	74.2	81.6	86.8	89.4	92.0	96.0	100.0	105.5	114.8	120.5	113.5	-
3361	Motor vehicles	86.0	82.4	91.2	89.8	90.3	88.6	91.0	100.0	113.3	123.3	110.4	108.7	-
3362	Motor vehicle bodies and trailers	75.8	71.8	88.3	96.3	97.7	97.3	98.4	100.0	102.7	103.1	98.4	99.4	-
3363	Motor vehicle parts	75.7	74.5	82.4	88.5	91.8	92.3	93.1	100.0	104.8	110.4	112.7	114.8	-
3364	Aerospace products and parts	87.7	92.1	94.1	98.2	93.8	93.7	98.1	100.0	118.5	118.0	101.0	114.7	-
3365	Railroad rolling stock	77.2	80.0	81.1	82.3	83.1	82.0	80.9	100.0	102.9	116.0	117.7	124.7	-
3366	Ship and boat building	99.6	92.6	98.5	101.3	99.0	93.1	94.1	100.0	100.3	112.2	120.1	119.8	-
3369	Other transportation equipment	62.6	62.0	88.4	99.8	93.4	93.1	99.8	100.0	110.8	113.3	130.9	146.9	-
3371	Household and institutional furniture	87.6	88.2	92.9	93.8	94.1	97.1	99.5	100.0	102.7	103.7	102.5	106.1	-
3372	Office furniture and fixtures	80.8	78.8	86.2	87.9	83.4	84.3	85.6	100.0	100.1	98.5	100.2	97.1	-
3379	Other furniture-related products	88.1	88.6	88.4	90.5	93.6	94.5	96.7	100.0	107.2	102.5	100.1	105.3	-
3391	Medical equipment and supplies	81.2	83.1	88.1	91.1	90.8	95.0	100.0	100.0	108.9	109.6	114.2	119.0	-
3399	Other miscellaneous manufacturing	90.1	90.6	90.0	92.3	93.0	96.0	99.6	100.0	101.9	105.2	112.9	110.9	-
	Wholesale trade													
42	Wholesale trade	77.8	79.1	86.2	89.5	91.3	93.3	96.2	100.0	104.4	110.9	114.1	117.1	123.6
423	Durable goods	65.7	66.1	75.0	80.5	84.5	88.9	94.0	100.0	105.6	115.3	119.6	120.3	127.7
4231	Motor vehicles and parts	76.6	73.3	82.2	88.0	94.1	93.6	94.9	100.0	104.7	119.8	114.0	114.1	121.7
4232	Furniture and furnishings	82.4	87.2	92.0	95.8	93.3	96.8	97.0	100.0	97.5	100.8	105.5	105.4	101.8
4233	Lumber and construction supplies	115.0	113.2	119.6	113.9	111.9	103.6	103.0	100.0	102.9	104.8	101.7	108.6	119.2
4234	Commercial equipment	33.8	37.3	48.2	56.2	60.5	74.7	88.4	100.0	118.2	141.1	148.9	164.9	189.4
4235	Metals and minerals	101.6	102.6	109.1	111.7	110.1	101.2	102.7	100.0	102.4	96.0	99.2	102.2	102.2
4236	Electric goods	46.8	47.6	51.4	59.1	68.2	79.3	87.8	100.0	105.9	126.2	151.7	148.1	161.2
4237	Hardware and plumbing	88.8	86.5	95.6	94.3	101.3	98.0	99.1	100.0	103.5	107.8	111.1	102.6	107.9
4238	Machinery and supplies	78.9	74.2	79.7	84.3	85.4	89.7	93.9	100.0	104.2	101.4	104.1	102.7	100.2
4239	Miscellaneous durable goods	89.5	96.6	112.1	113.2	106.1	99.2	101.0	100.0	101.8	112.6	116.7	116.1	125.5
424	Nondurable goods	98.4	99.8	103.2	103.0	101.8	99.7	99.2	100.0	102.8	104.1	103.5	106.9	112.6
4241	Paper and paper products	81.0	85.5	96.5	97.2	101.5	99.0	96.5	100.0	100.4	105.5	105.5	109.0	120.2
4242	Druggists' goods	81.8	86.6	91.8	89.3	92.8	95.4	98.3	100.0	99.6	101.7	96.8	101.2	116.0
4243	Apparel and piece goods	103.9	103.3	100.1	97.7	103.8	92.2	99.0	100.0	104.1	103.5	102.7	102.4	111.5
4244	Grocery and related products	96.4	98.2	103.6	105.1	103.3	103.0	99.8	100.0	101.9	103.6	105.2	109.4	111.8
4245	Farm product raw materials	80.6	85.9	85.9	84.0	80.4	87.7	90.6	100.0	100.4	114.2	119.0	120.0	135.4
4246	Chemicals	107.3	106.6	112.5	110.0	110.5	102.1	100.0	100.0	99.3	98.0	95.8	93.6	96.9
4247	Petroleum	97.3	107.0	118.3	119.1	115.8	108.7	105.9	100.0	115.0	112.0	112.5	116.5	126.0
4248	Alcoholic beverages	109.4	111.2	107.4	105.6	105.9	102.5	104.5	100.0	109.7	110.1	111.0	111.6	117.3
4249	Miscellaneous nondurable goods	107.3	98.2	93.9	97.5	94.8	96.2	98.7	100.0	101.7	99.6	106.2	104.2	97.0
425	Electronic markets and agents and brokers	70.7	73.6	81.5	85.9	88.0	91.1	95.7	100.0	104.6	114.4	124.1	131.3	132.6
42511	Business to business electronic markets	70.4	72.6	80.3	84.8	88.3	90.5	95.3	100.0	103.5	121.7	141.3	169.4	205.0
42512	Wholesale trade agents and brokers	70.8	74.0	82.3	86.8	88.4	91.8	96.1	100.0	104.8	110.5	115.7	114.2	109.3
	Retail trade													
44-45	Retail trade	83.2	83.3	86.8	89.4	92.8	94.7	97.7	100.0	104.3	110.3	114.2	117.4	122.7
441	Motor vehicle and parts dealers	89.7	88.3	92.6	94.0	96.9	97.0	98.8	100.0	102.7	106.4	107.2	110.0	109.7
4411	Automobile dealers	92.1	90.8	94.8	96.0	98.0	97.2	98.9	100.0	102.7	106.4	106.6	109.1	106.0
4412	Other motor vehicle dealers	69.0	71.7	78.3	84.1	90.2	91.0	97.7	100.0	105.9	113.0	108.6	112.6	116.4
4413	Auto parts, accessories, and tire stores	85.0	84.0	89.1	90.6	95.4	97.9	98.3	100.0	105.7	110.0	112.0	109.3	115.8
442	Furniture and home furnishings stores	80.7	81.1	88.1	88.3	90.4	94.1	99.4	100.0	101.7	109.6	115.7	118.5	125.1
4421	Furniture stores	82.1	83.5	89.0	89.0	88.9	92.5	97.8	100.0	102.1	108.2	114.8	121.1	128.6
4422	Home furnishings stores	78.5	77.6	86.8	87.2	92.1	95.9	101.3	100.0	101.3	111.4	116.8	115.6	121.4
443	Electronics and appliance stores	46.0	49.2	56.9	65.5	77.6	89.2	95.0	100.0	122.9	152.2	177.7	199.1	240.0
444	Building material and garden supply stores	81.8	80.2	84.0	88.0	93.7	93.7	97.5	100.0	106.7	112.3	113.1	115.8	119.9

51. Continued - Annual indexes of output per hour for selected NAICS industries, 1990-2002

[1997=100]

NAICS	Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
4441	Building material and supplies dealers	83.2	80.7	84.7	89.1	94.8	94.8	97.6	100.0	107.6	113.7	113.8	115.3	119.8
4442	Lawn and garden equipment and supplies stores	74.5	77.5	80.2	81.5	86.9	87.0	97.1	100.0	101.2	103.5	108.2	119.4	121.2
445	Food and beverage stores	107.1	106.6	106.9	105.4	104.3	102.5	100.3	100.0	99.9	103.7	105.1	107.6	110.3
4451	Grocery stores	106.5	106.6	106.7	105.9	104.9	103.0	100.8	100.0	100.3	104.3	104.9	107.5	110.3
4452	Specialty food stores	122.9	115.0	111.4	107.6	104.5	101.1	95.5	100.0	95.0	99.6	105.6	110.8	114.2
4453	Beer, wine and liquor stores	100.1	100.2	101.0	94.4	92.9	96.2	103.1	100.0	105.8	99.8	111.1	110.4	111.8
446	Health and personal care stores	92.0	91.6	90.7	91.9	91.8	93.0	95.7	100.0	104.1	106.9	111.4	112.7	118.8
447	Gasoline stations	84.8	85.7	88.5	92.8	96.8	99.7	99.4	100.0	105.6	110.6	106.5	109.8	117.5
448	Clothing and clothing accessories stores	69.5	70.5	75.3	78.9	83.3	91.2	97.9	100.0	105.4	112.8	120.3	123.5	129.0
4481	Clothing stores	68.9	71.4	77.1	79.2	81.9	90.1	97.1	100.0	106.7	113.3	120.9	125.2	132.7
4482	Shoe stores	73.7	73.1	78.2	79.2	88.3	93.7	102.4	100.0	97.8	104.9	109.6	115.8	120.0
4483	Jewelry, luggage, and leather goods stores	68.6	64.5	65.0	77.1	85.0	94.1	97.3	100.0	107.0	118.3	128.0	122.5	121.5
451	Sporting goods, hobby, book, and music stores	80.8	85.6	83.8	84.0	87.2	93.0	94.7	100.0	108.7	114.9	121.1	125.4	132.9
4511	Sporting goods and musical instrument stores	77.1	82.8	79.8	80.6	83.9	92.3	92.5	100.0	112.9	120.4	128.3	130.4	137.9
4512	Book, periodical, and music stores	89.0	91.8	92.5	91.6	94.5	94.5	99.3	100.0	101.0	104.7	108.0	116.0	123.8
452	General merchandise stores	75.3	79.0	83.0	88.5	90.6	92.2	96.9	100.0	105.0	113.1	119.9	124.2	130.5
4521	Department stores	84.0	88.3	91.6	95.0	95.1	94.7	98.4	100.0	100.6	104.5	106.3	104.0	104.7
4529	Other general merchandise stores	61.4	64.8	69.7	77.8	82.6	87.6	94.3	100.0	113.4	129.8	145.9	162.1	177.5
453	Miscellaneous store retailers	70.6	68.0	74.2	79.1	87.0	89.5	95.0	100.0	108.3	109.8	111.3	108.4	115.6
4531	Florists	75.1	75.9	85.1	91.4	85.4	83.5	96.1	100.0	101.2	117.3	116.0	108.6	120.7
4532	Office supplies, stationery and gift stores	64.6	66.3	71.5	75.8	87.5	90.9	91.8	100.0	113.0	118.0	124.1	125.1	140.3
4533	Used merchandise stores	84.9	83.1	89.7	88.9	87.3	90.2	97.4	100.0	113.5	109.8	115.7	115.0	121.4
4539	Other miscellaneous store retailers	79.6	69.2	74.7	80.5	89.7	90.5	98.0	100.0	105.0	101.6	99.6	93.2	92.8
454	Nonstore retailers	54.4	55.0	63.4	66.7	73.8	80.9	91.6	100.0	111.3	125.4	142.8	146.9	169.6
4541	Electronic shopping and mail-order houses	43.5	46.7	50.6	58.3	62.9	71.9	84.4	100.0	118.2	141.5	159.8	177.5	209.8
4542	Vending machine operators	97.1	95.4	95.1	92.8	94.1	89.3	96.9	100.0	114.1	118.1	127.1	110.4	113.3
4543	Direct selling establishments	70.0	67.6	82.1	79.7	89.2	94.7	102.2	100.0	96.2	96.3	104.3	98.7	110.2
	Transportation and warehousing													
481	Air transportation	77.5	78.2	81.4	84.7	90.8	95.3	98.8	100.0	97.6	98.2	98.2	91.9	103.2
482111	Line-haul railroads	69.8	75.3	82.3	85.7	88.6	92.0	98.4	100.0	102.1	105.5	114.3	121.9	131.9
48412	General freight trucking, long-distance	88.5	92.4	97.5	95.6	98.1	95.4	95.7	100.0	99.1	102.0	105.5	104.2	109.4
491	U.S. Postal service	96.1	95.8	96.5	99.0	98.5	98.3	96.7	100.0	101.4	102.4	104.9	106.1	107.0
	Information													
5111	Newspaper, book, and directory publishers	97.4	96.1	95.8	95.3	93.0	93.5	92.7	100.0	104.5	108.5	110.1	106.4	108.1
5112	Software publishers	28.6	30.6	42.7	51.7	64.6	73.0	88.0	100.0	115.9	113.0	103.9	101.9	106.7
51213	Motion picture and video exhibition	109.4	108.9	104.1	104.6	103.4	99.9	100.0	100.0	99.9	102.0	106.5	104.7	104.4
5151	Radio and television broadcasting	96.1	97.8	102.8	101.4	106.0	106.1	104.1	100.0	99.1	99.4	98.4	94.3	100.4
5152	Cable and other subscription programming	98.8	94.3	96.0	93.6	92.0	94.4	93.7	100.0	129.3	133.2	135.7	125.3	131.4
5171	Wired telecommunications carriers	64.8	68.4	74.5	79.7	85.1	90.6	97.5	100.0	105.5	112.7	119.9	121.0	130.6
5172	Wireless telecommunications carriers	76.3	73.8	85.6	94.8	97.1	98.3	103.0	100.0	114.2	134.3	139.0	172.7	192.0
5175	Cable and other program distribution	99.1	94.3	95.9	93.5	91.9	94.2	93.5	100.0	95.7	94.5	90.4	87.6	93.5
	Finance and insurance													
52211	Commercial banking	80.5	83.2	83.3	90.3	92.9	96.0	99.3	100.0	98.0	101.5	104.2	101.6	103.8
	Real estate and rental and leasing													
532111	Passenger car rental	89.8	97.8	104.4	106.1	107.9	101.1	108.9	100.0	101.2	113.1	112.0	112.1	113.3
53212	Truck, trailer and RV rental and leasing	70.7	71.7	69.5	75.8	82.0	90.3	96.7	100.0	93.7	97.8	95.9	93.6	91.4
	Professional, scientific, and technical services													
541213	Tax preparation services	92.4	84.7	99.5	119.1	119.9	96.2	92.1	100.0	105.1	99.2	91.8	78.2	92.1
54181	Advertising agencies	105.0	99.7	111.9	111.3	106.8	101.4	102.1	100.0	95.8	110.1	116.6	116.7	123.9
	Accomodation and food services													
7211	Traveler accommodations	82.9	85.4	92.9	93.0	97.0	99.2	100.1	100.0	100.0	103.6	107.7	102.0	104.1
722	Food services and drinking places	102.9	102.3	101.7	102.3	100.8	100.6	99.2	100.0	101.2	101.1	103.5	103.7	104.9
7221	Full-service restaurants	99.1	98.3	97.5	97.7	97.8	96.6	96.3	100.0	100.0	99.2	100.8	100.8	102.0
7222	Limited-service eating places	103.3	103.3	102.7	105.6	103.6	104.7	102.2	100.0	102.4	102.5	105.1	106.6	107.1
7223	Special food services	107.2	106.9	106.4	103.8	101.1	99.3	97.6	100.0	102.1	106.0	111.7	108.4	108.1
7224	Drinking places, alcoholic beverages	125.7	121.2	121.5	112.7	102.6	104.4	102.4	100.0	100.0	99.4	100.4	98.2	107.2
	Other services (except public administration)													
8111	Automotive repair and maintenance	92.8	86.5	90.0	91.2	96.7	102.9	98.9	100.0	105.0	106.9	108.6	109.3	103.7
81211	Hair, nail and skin care services	81.6	79.8	85.6	84.3	88.7	92.4	97.1	100.0	102.7	103.6	103.0	109.5	104.2
81221	Funeral homes and funeral services	96.1	94.3	104.7	100.4	103.6	100.4	97.9	100.0	103.8	100.4	94.5	93.9	90.9
8123	Drycleaning and laundry services	95.6	93.2	94.9	93.8	95.9	98.8	101.6	100.0	105.0	109.5	113.7	121.1	120.2
81292	Photofinishing	117.3	115.6	116.2	123.6	124.9	114.7	103.2	100.0	99.4	106.9	107.6	115.0	133.6

NOTE: Dash indicates data are not available.

52. Unemployment rates, approximating U.S. concepts, in nine countries, quarterly data seasonally adjusted

Country	Annual average		2002				2003				2004
	2002	2003	I	II	III	IV	I	II	III	IV	I
United States	5.8	6.0	5.7	5.8	5.7	5.9	5.8	6.1	6.1	5.9	5.6
Canada	7.0	6.9	7.1	6.9	7.0	6.9	6.7	6.9	7.2	6.8	6.7
Australia	6.4	6.1	6.7	6.4	6.3	6.2	6.2	6.2	6.1	5.8	5.7
Japan[1]	5.4	5.3	5.4	5.4	5.5	5.4	5.4	5.4	5.2	5.1	5.0
France[1]	8.7	9.3	8.5	8.6	8.7	8.9	9.0	9.2	9.4	9.4	9.4
Germany	8.6	9.3	8.3	8.5	8.7	8.9	9.2	9.4	9.4	9.3	9.2
Italy[1,2]	9.1	8.8	9.2	9.2	9.1	9.0	9.0	8.8	8.7	8.6	8.6
Sweden[1]	5.1	5.8	5.2	5.0	5.1	5.2	5.2	5.6	5.8	6.2	6.6
United Kingdom	5.2	5.0	5.1	5.2	5.2	5.1	5.1	5.0	5.0	4.9	4.8

[1] Preliminary data for 2003.

[2] Quarterly rates are for the first month of the quarter.

NOTE: Quarterly figures for France and Germany are calculated by applying annual adjustment factors to current published data, and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. See "Notes on the data" for information on breaks in series. For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries, 1959-2003* (Bureau of Labor Statistics, June 23, 2004), on the Internet at **http://www.bls.gov/fls/home.htm**. Monthly and quarterly unemployment rates, updated monthly, are also on this site.

53. Annual data: employment status of the working-age population, approximating U.S. concepts, 10 countries

[Numbers in thousands]

Employment status and country	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Civilian labor force											
United States	129,200	131,056	132,304	133,943	136,297	137,673	139,368	142,583	143,734	144,863	146,510
Canada	14,308	14,400	14,517	14,669	14,958	15,237	15,536	15,789	16,027	16,475	16,819
Australia	8,613	8,770	8,995	9,115	9,204	9,339	9,414	9,590	9,752	9,907	10,092
Japan	65,470	65,780	65,990	66,450	67,200	67,240	67,090	66,990	66,870	66,240	66,010
France	24,480	24,670	24,760	25,010	25,130	25,460	25,790	26,070	26,350	26,590	26,730
Germany	39,102	39,074	38,980	39,142	39,415	39,754	39,375	39,302	39,459	39,413	39,276
Italy	22,570	22,450	22,460	22,570	22,680	22,960	23,130	23,340	23,540	23,750	23,880
Netherlands	7,010	7,150	7,210	7,300	7,540	7,620	7,850	8,150	8,340	8,300	8,300
Sweden	4,444	4,418	4,460	4,459	4,418	4,402	4,430	4,489	4,530	4,544	4,567
United Kingdom	28,165	28,149	28,157	28,260	28,417	28,479	28,769	28,930	29,053	29,288	29,490
Participation rate[1]											
United States	66.3	66.6	66.6	66.8	67.1	67.1	67.1	67.1	66.8	66.6	66.2
Canada	65.5	65.2	64.9	64.7	65.0	65.4	65.8	65.9	66.0	66.8	67.3
Australia	63.5	63.9	64.5	64.6	64.3	64.3	64.0	64.4	64.4	64.4	64.6
Japan	63.3	63.1	62.9	63.0	63.2	62.8	62.4	62.0	61.6	60.8	60.3
France	55.4	55.5	55.4	55.6	55.5	55.9	56.3	56.6	56.8	57.0	57.0
Germany	57.8	57.4	57.1	57.1	57.3	57.7	56.8	56.6	56.6	56.3	56.1
Italy	47.9	47.3	47.1	47.1	47.2	47.6	47.8	48.1	48.3	48.6	48.8
Netherlands	57.9	58.6	58.8	59.2	60.8	61.1	62.6	64.5	65.8	65.0	64.6
Sweden	64.5	63.7	64.1	64.0	63.3	62.8	62.8	63.8	63.7	64.0	64.0
United Kingdom	62.7	62.6	62.4	62.4	62.6	62.5	62.9	62.9	62.7	62.9	62.9
Employed											
United States	120,259	123,060	124,900	126,708	129,558	131,463	133,488	136,891	136,933	136,485	137,736
Canada	12,770	13,027	13,271	13,380	13,705	14,068	14,456	14,827	14,997	15,325	15,660
Australia	7,699	7,942	8,256	8,364	8,444	8,618	8,762	8,989	9,091	9,271	9,481
Japan	63,810	63,860	63,890	64,200	64,900	64,450	63,920	63,790	63,470	62,650	62,510
France	21,710	21,750	21,960	22,040	22,170	22,600	23,050	23,690	24,140	24,280	24,250
Germany	35,989	35,756	35,780	35,637	35,508	36,061	36,042	36,236	36,350	36,018	35,615
Italy	20,270	19,940	19,820	19,920	19,990	20,210	20,460	20,840	21,270	21,580	21,790
Netherlands	6,570	6,660	6,730	6,860	7,160	7,320	7,600	7,910	8,130	8,070	8,010
Sweden	4,028	3,992	4,056	4,019	3,973	4,034	4,117	4,229	4,303	4,310	4,303
United Kingdom	25,242	25,429	25,718	25,964	26,433	26,696	27,048	27,350	27,570	27,768	28,011
Employment-population ratio[2]											
United States	61.7	62.5	62.9	63.2	63.8	64.1	64.3	64.4	63.7	62.7	62.3
Canada	58.5	59.0	59.4	59.1	59.7	60.4	61.3	62.1	61.9	62.4	63.0
Australia	56.8	57.8	59.2	59.3	59.0	59.3	59.6	60.3	60.1	60.3	60.7
Japan	61.7	61.3	60.9	60.9	61.0	60.2	59.4	59.0	58.4	57.5	57.1
France	49.1	49.0	49.1	49.0	49.0	49.7	50.3	51.4	52.0	52.0	51.7
Germany	53.2	52.6	52.4	52.0	51.6	52.3	52.0	52.2	52.2	51.5	50.9
Italy	43.0	42.0	41.5	41.6	41.6	41.9	42.3	42.9	43.6	44.1	44.6
Netherlands	54.2	54.6	54.9	55.7	57.8	58.7	60.6	62.6	64.2	63.2	62.1
Sweden	58.5	57.6	58.3	57.7	56.9	57.6	58.4	60.1	60.5	60.7	60.3
United Kingdom	56.2	56.5	57.0	57.4	58.2	58.6	59.1	59.4	59.5	59.6	59.8
Unemployed											
United States	8,940	7,996	7,404	7,236	6,739	6,210	5,880	5,692	6,801	8,378	8,774
Canada	1,539	1,373	1,246	1,289	1,252	1,169	1,080	962	1,031	1,150	1,159
Australia	914	829	739	751	759	721	652	602	661	636	611
Japan	1,660	1,920	2,100	2,250	2,300	2,790	3,170	3,200	3,400	3,590	3,500
France	2,770	2,920	2,800	2,970	2,960	2,870	2,740	2,380	2,210	2,310	2,480
Germany	3,113	3,318	3,200	3,505	3,907	3,693	3,333	3,065	3,110	3,396	3,661
Italy	2,300	2,510	2,640	2,650	2,690	2,750	2,670	2,500	2,270	2,160	2,100
Netherlands	440	490	480	440	370	300	250	240	210	230	320
Sweden	416	426	404	440	445	368	313	260	227	234	264
United Kingdom	2,916	2,716	2,439	2,297	1,985	1,783	1,721	1,580	1,483	1,520	1,479
Unemployment rate											
United States	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.7	5.8	6.0
Canada	10.8	9.5	8.6	8.8	8.4	7.7	7.0	6.1	6.4	7.0	6.9
Australia	10.6	9.4	8.2	8.2	8.3	7.7	6.9	6.3	6.8	6.3	6.1
Japan	2.5	2.9	3.2	3.4	3.4	4.1	4.7	4.8	5.1	5.4	5.3
France	11.3	11.8	11.3	11.9	11.8	11.3	10.6	9.1	8.4	8.7	9.3
Germany	8.0	8.5	8.2	9.0	9.9	9.3	8.5	7.8	7.9	8.6	9.3
Italy	10.2	11.2	11.8	11.7	11.9	12.0	11.5	10.7	9.6	9.1	8.8
Netherlands	6.3	6.9	6.7	6.0	4.9	3.9	3.2	2.9	2.5	2.7	3.8
Sweden	9.4	9.6	9.1	9.9	10.1	8.4	7.1	5.8	5.0	5.1	5.8
United Kingdom	10.4	9.6	8.7	8.1	7.0	6.3	6.0	5.5	5.1	5.2	5.0

[1] Labor force as a percent of the working-age population.

[2] Employment as a percent of the working-age population.

NOTE: See notes on the data for information on breaks in series.

For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries, 1959-2003* (Bureau of Labor Statistics, June 23, 2004), on the Internet at: http://www.bls.gov/fls/home.htm.

54. Annual indexes of manufacturing productivity and related measures, 12 countries

[1992 = 100]

Item and country	1960	1970	1980	1990	1991	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Output per hour															
United States	–	–	70.5	96.9	97.9	102.1	107.3	113.8	117.0	121.3	126.5	133.7	142.1	142.7	155.9
Canada	37.8	54.9	72.9	93.4	95.3	105.8	110.8	112.4	109.7	113.5	115.5	122.1	129.3	127.0	130.5
Japan	13.8	37.5	63.2	94.4	99.0	101.7	103.3	111.0	116.1	121.0	121.2	126.7	135.9	135.9	139.5
Belgium	18.0	32.9	65.4	96.8	99.1	102.5	108.4	113.2	116.3	125.5	126.9	125.5	130.8	132.6	141.7
Denmark	28.1	49.4	86.2	99.1	99.5	99.3	–	–	–	–	–	–	–	–	–
France	19.9	39.0	61.6	93.9	97.0	101.0	108.9	114.4	114.7	121.7	127.9	133.0	143.2	148.0	152.1
Germany	29.2	52.0	77.2	99.0	98.3	101.8	109.6	112.3	114.7	120.4	122.0	121.4	127.0	127.8	131.0
Italy	24.6	46.2	78.6	96.6	96.1	101.2	104.8	107.9	108.3	110.3	110.8	110.6	113.6	115.9	114.3
Netherlands	18.8	38.5	69.1	98.7	99.0	102.0	113.1	117.3	119.3	121.4	124.1	127.0	132.7	132.3	133.1
Norway	37.6	59.1	77.9	98.1	98.2	99.6	99.6	100.7	102.5	102.0	99.9	103.6	106.6	108.9	110.9
Sweden	27.3	52.2	73.1	94.6	95.5	107.3	117.8	124.5	129.5	141.0	149.5	162.7	175.5	170.3	184.3
United Kingdom	30.0	43.2	54.4	89.2	93.8	103.9	108.5	106.5	105.8	107.7	109.2	114.4	121.9	126.4	127.6
Output															
United States	–	–	75.8	101.6	98.3	103.5	111.1	118.4	121.3	127.9	133.1	139.5	146.1	137.3	139.8
Canada	33.4	58.9	83.6	106.0	99.0	105.9	114.1	119.6	119.6	127.7	133.9	144.9	159.2	153.6	158.0
Japan	10.7	39.2	60.4	97.1	102.0	96.3	94.9	98.9	103.0	106.5	100.2	101.9	109.2	105.5	103.4
Belgium	30.7	57.6	78.2	101.0	100.7	97.0	101.4	104.2	105.9	112.7	114.4	114.4	119.9	120.4	121.6
Denmark	44.4	73.9	94.4	102.8	101.5	95.6	105.6	111.6	106.7	115.2	115.7	117.7	122.1	127.5	127.8
France	30.0	57.7	81.6	99.1	99.8	95.7	100.3	104.9	104.6	109.7	115.0	118.7	124.3	128.0	128.1
Germany	41.5	70.9	85.3	99.1	102.3	92.4	95.1	95.2	92.5	95.7	97.7	95.8	100.1	99.9	99.6
Italy	23.0	48.1	84.4	99.4	99.3	96.5	102.4	107.2	105.4	108.8	110.7	110.3	113.7	114.6	113.8
Netherlands	31.9	59.8	76.9	99.0	99.8	97.7	104.5	108.2	108.9	111.6	114.9	117.6	122.8	121.7	119.7
Norway	57.7	91.0	104.9	101.4	99.0	101.7	104.6	107.3	110.3	114.2	113.7	113.6	112.8	113.4	112.6
Sweden	45.9	80.7	90.7	110.1	104.1	101.9	117.0	131.9	136.4	146.5	158.3	172.5	188.3	183.1	189.3
United Kingdom	67.5	90.2	87.2	105.4	100.1	101.5	106.2	107.8	108.7	110.7	111.4	112.2	114.9	1134.0	109.4
Total hours															
United States	92.1	104.4	107.5	104.8	100.4	101.4	103.6	104.0	103.6	105.4	105.2	104.4	102.8	96.3	89.7
Canada	88.3	107.1	114.6	113.5	103.9	100.1	103.0	106.4	109.0	112.4	115.9	118.7	123.1	120.9	121.1
Japan	77.8	104.4	95.6	102.9	103.1	94.7	91.9	89.1	88.7	88.0	82.7	80.4	80.3	77.7	74.2
Belgium	170.7	174.7	119.7	104.3	101.5	94.7	93.6	92.0	91.0	89.8	90.2	91.2	91.7	90.8	85.8
Denmark	157.8	149.5	109.6	103.7	102.1	96.2	–	–	–	–	–	–	–	–	–
France	140.3	147.8	132.5	105.6	102.9	94.7	92.1	91.7	91.2	90.2	89.9	89.2	86.8	86.5	84.2
Germany	142.3	136.3	110.5	100.1	104.1	90.8	86.8	84.8	80.6	79.5	80.1	78.9	78.8	78.2	76.1
Italy	93.5	104.0	107.4	102.9	103.3	95.4	97.7	99.4	97.3	98.6	99.9	99.8	100.1	98.9	99.5
Netherlands	169.8	155.5	111.2	100.3	100.8	95.8	92.4	92.3	91.2	91.9	92.6	92.6	92.5	91.9	89.9
Norway	153.6	153.9	134.7	103.4	100.8	102.1	105.0	106.6	107.6	112.0	113.7	109.6	105.9	104.1	101.6
Sweden	168.3	154.7	124.0	116.4	109.0	94.9	99.4	105.9	105.3	103.9	105.9	106.0	107.3	107.5	102.7
United Kingdom	224.6	208.8	160.5	118.1	106.6	92.7	97.9	101.2	102.8	102.8	101.9	98.1	94.3	89.8	85.7
Compensation per hour															
United States	14.9	23.7	55.6	90.8	95.6	102.7	105.6	107.9	109.4	111.5	117.4	122.1	131.1	134.3	140.6
Canada	10.0	17.1	47.5	88.3	95.0	102.0	103.7	106.0	107.0	109.3	111.7	115.8	119.6	123.8	126.8
Japan	4.3	16.4	58.5	90.6	96.5	102.7	104.7	108.3	109.1	112.6	115.4	114.8	113.7	114.5	122.8
Belgium	5.4	13.7	52.5	90.1	97.3	104.8	106.1	109.2	111.1	115.2	117.0	118.5	120.6	127.2	136.5
Denmark	3.8	11.1	45.0	92.7	96.0	103.0	–	–	–	–	–	–	–	–	–
France	4.3	10.5	41.2	90.9	96.4	103.1	106.5	110.4	112.2	111.8	112.7	116.6	123.4	128.2	132.4
Germany	8.1	20.7	53.6	89.4	91.5	106.4	111.8	117.6	123.3	125.7	127.6	130.6	137.4	142.0	145.5
Italy	1.8	5.3	30.4	87.6	94.2	105.7	106.8	111.3	119.0	123.0	122.2	124.2	127.8	132.4	135.6
Netherlands	6.2	19.4	60.5	89.8	94.8	104.5	109.0	112.1	114.4	117.2	122.0	126.0	132.0	138.9	146.0
Norway	4.7	11.8	39.0	92.3	97.5	101.5	104.4	109.2	113.6	118.7	125.7	133.0	140.5	148.2	157.2
Sweden	4.1	10.7	37.3	87.8	95.5	97.4	99.8	106.8	115.2	121.0	125.6	130.3	136.8	143.8	149.2
United Kingdom	2.9	6.1	32.1	82.9	93.8	105.1	108.0	109.5	111.3	116.1	123.1	130.4	137.7	144.2	149.2
Unit labor costs: National currency basis															
United States	–	–	78.8	93.7	97.6	100.6	98.5	94.8	93.5	91.9	92.8	91.3	92.3	94.1	90.2
Canada	26.4	31.1	65.2	94.6	99.6	96.4	93.6	94.3	97.5	96.2	96.7	94.9	92.5	97.4	97.1
Japan	31.3	43.8	92.6	95.9	97.5	101.0	101.4	97.5	94.0	93.0	95.2	90.6	83.6	84.4	88.0
Belgium	30.1	41.7	80.3	93.0	98.1	102.3	97.9	96.4	95.5	91.8	92.2	94.4	92.2	95.9	96.4
Denmark	13.6	22.4	52.2	93.5	96.5	103.7	96.2	96.4	103.2	99.4	102.8	103.7	101.8	101.3	102.1
France	21.7	26.8	67.0	96.8	99.3	102.0	97.8	96.5	97.8	91.9	88.1	87.6	86.2	86.6	87.1
Germany	27.8	39.8	69.4	90.3	93.1	104.5	102.0	104.7	107.5	104.5	104.6	107.6	108.1	111.2	111.1
Italy	7.5	11.9	38.7	90.7	98.0	104.5	101.9	103.2	109.8	111.4	110.3	112.3	112.5	114.2	118.7
Netherlands	32.9	50.4	87.6	91.1	95.7	102.4	96.4	95.6	95.9	96.5	98.3	99.1	99.5	105.0	109.7
Norway	12.6	20.0	50.0	94.2	99.2	101.9	104.8	108.4	110.8	116.4	125.7	128.4	131.9	136.1	141.8
Sweden	15.0	20.6	51.0	92.9	100.0	90.8	84.7	85.8	89.0	85.8	84.0	80.1	77.9	84.4	80.9
United Kingdom	9.8	14.1	59.0	92.9	99.9	100.6	99.6	102.8	105.2	107.8	112.7	114.0	113.0	114.2	116.9
Unit labor costs: U.S. dollar basis															
United States	–	–	78.8	93.7	97.6	100.6	98.5	94.8	93.5	91.9	92.8	91.3	92.3	94.1	90.2
Canada	32.9	36.0	67.4	98.0	105.1	90.3	82.8	83.0	86.4	84.0	78.8	77.2	75.3	76.0	74.8
Japan	11.0	15.5	51.8	83.9	91.8	115.3	125.8	131.6	109.5	97.4	92.2	101.0	98.4	88.0	89.1
Belgium	19.4	27.0	88.3	89.5	92.3	95.1	94.2	105.2	99.1	82.4	81.6	80.2	67.8	68.4	72.6
Denmark	12.0	18.0	55.9	91.2	91.0	96.5	91.4	104.0	107.5	90.8	92.6	89.5	76.0	73.4	78.2
France	23.4	25.7	83.9	94.1	93.1	95.3	93.4	102.5	101.2	83.3	79.1	75.3	64.2	62.6	66.4
Germany	10.4	17.1	59.6	87.3	87.5	98.7	98.2	114.2	111.6	94.0	92.9	91.5	79.7	79.5	83.9
Italy	14.3	22.3	55.7	93.3	97.3	81.8	77.9	78.0	87.7	80.6	78.2	76.2	66.1	65.1	71.4
Netherlands	15.3	24.5	77.5	87.9	90.0	96.9	93.2	104.8	100.0	87.0	87.2	84.3	73.3	75.0	82.8
Norway	11.0	17.4	62.9	93.6	95.0	89.2	92.3	106.4	106.6	102.1	103.5	102.2	93.0	94.0	110.3
Sweden	16.9	23.1	70.2	91.3	96.3	67.8	64.0	70.0	77.3	65.4	61.5	56.4	49.5	47.6	48.5
United Kingdom	15.6	19.1	77.7	93.8	100.0	85.6	86.3	91.8	93.0	99.9	105.7	104.4	96.9	93.0	99.4

NOTE: Data for Germany for years before 1991 are for the former West Germany. Data for 1991 onward are for unified Germany. Dash indicates data not available.

55. Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]												
	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]	1999[4]	2000[4]	2001[4]
PRIVATE SECTOR[5]													
Total cases	8.6	8.8	8.4	8.9	8.5	8.4	8.1	7.4	7.1	6.7	6.3	6.1	5.7
Lost workday cases	4.0	4.1	3.9	3.9	3.8	3.8	3.6	3.4	3.3	3.1	3.0	3.0	2.8
Lost workdays	78.7	84.0	86.5	93.8	–	–	–	–	–	–	–	–	–
Agriculture, forestry, and fishing[5]													
Total cases	10.9	11.6	10.8	11.6	11.2	10.0	9.7	8.7	8.4	7.9	7.3	7.1	7.3
Lost workday cases	5.7	5.9	5.4	5.4	5.0	4.7	4.3	3.9	4.1	3.9	3.4	3.6	3.6
Lost workdays	100.9	112.2	108.3	126.9	–	–	–	–	–	–	–	–	–
Mining													
Total cases	8.5	8.3	7.4	7.3	6.8	6.3	6.2	5.4	5.9	4.9	4.4	4.7	4.0
Lost workday cases	4.8	5.0	4.5	4.1	3.9	3.9	3.9	3.2	3.7	2.9	2.7	3.0	2.4
Lost workdays	137.2	119.5	129.6	204.7	–	–	–	–	–	–	–	–	–
Construction													
Total cases	14.3	14.2	13.0	13.1	12.2	11.8	10.6	9.9	9.5	8.8	8.6	8.3	7.9
Lost workday cases	6.8	6.7	6.1	5.8	5.5	5.5	4.9	4.5	4.4	4.0	4.2	4.1	4.0
Lost workdays	143.3	147.9	148.1	161.9	–	–	–	–	–	–	–	–	–
General building contractors:													
Total cases	13.9	13.4	12.0	12.2	11.5	10.9	9.8	9.0	8.5	8.4	8.0	7.8	6.9
Lost workday cases	6.5	6.4	5.5	5.4	5.1	5.1	4.4	4.0	3.7	3.9	3.7	3.9	3.5
Lost workdays	137.3	137.6	132.0	142.7	–	–	–	–	–	–	–	–	–
Heavy construction, except building:													
Total cases	13.8	13.8	12.8	12.1	11.1	10.2	9.9	9.0	8.7	8.2	7.8	7.6	7.8
Lost workday cases	6.5	6.3	6.0	5.4	5.1	5.0	4.8	4.3	4.3	4.1	3.8	3.7	4.0
Lost workdays	147.1	144.6	160.1	165.8	–	–	–	–	–	–	–	–	–
Special trades contractors:													
Total cases	14.6	14.7	13.5	13.8	12.8	12.5	11.1	10.4	10.0	9.1	8.9	8.6	8.2
Lost workday cases	6.9	6.9	6.3	6.1	5.8	5.8	5.0	4.8	4.7	4.1	4.4	4.3	4.1
Lost workdays	144.9	153.1	151.3	168.3	–	–	–	–	–	–	–	–	–
Manufacturing													
Total cases	13.1	13.2	12.7	12.5	12.1	12.2	11.6	10.6	10.3	9.7	9.2	9.0	8.1
Lost workday cases	5.8	5.8	5.6	5.4	5.3	5.5	5.3	4.9	4.8	4.7	4.6	4.5	4.1
Lost workdays	113.0	120.7	121.5	124.6	–	–	–	–	–	–	–	–	–
Durable goods:													
Total cases	14.1	14.2	13.6	13.4	13.1	13.5	12.8	11.6	11.3	10.7	10.1	–	8.8
Lost workday cases	6.0	6.0	5.7	5.5	5.4	5.7	5.6	5.1	5.1	5.0	4.8	–	4.3
Lost workdays	116.5	123.3	122.9	126.7	–	–	–	–	–	–	–	–	–
Lumber and wood products:													
Total cases	18.4	18.1	16.8	16.3	15.9	15.7	14.9	14.2	13.5	13.2	13.0	12.1	10.6
Lost workday cases	9.4	8.8	8.3	7.6	7.6	7.7	7.0	6.8	6.5	6.8	6.7	6.1	5.5
Lost workdays	177.5	172.5	172.0	165.8	–	–	–	–	–	–	–	–	–
Furniture and fixtures:													
Total cases	16.1	16.9	15.9	14.8	14.6	15.0	13.9	12.2	12.0	11.4	11.5	11.2	11.0
Lost workday cases	7.2	7.8	7.2	6.6	6.5	7.0	6.4	5.4	5.8	5.7	5.9	5.9	5.7
Lost workdays	–	–	–	128.4	–	–	–	–	–	–	–	–	–
Stone, clay, and glass products:													
Total cases	15.5	15.4	14.8	13.6	13.8	13.2	12.3	12.4	11.8	11.8	10.7	10.4	10.1
Lost workday cases	7.4	7.3	6.8	6.1	6.3	6.5	5.7	6.0	5.7	6.0	5.4	5.5	5.1
Lost workdays	149.8	160.5	156.0	152.2	–	–	–	–	–	–	–	–	–
Primary metal industries:													
Total cases	18.7	19.0	17.7	17.5	17.0	16.8	16.5	15.0	15.0	14.0	12.9	12.6	10.7
Lost workday cases	8.1	8.1	7.4	7.1	7.3	7.2	7.2	6.8	7.2	7.0	6.3	6.3	5.3
Lost workdays	168.3	180.2	169.1	175.5	–	–	–	–	–	–	–	–	11.1
Fabricated metal products:													
Total cases	18.5	18.7	17.4	16.8	16.2	16.4	15.8	14.4	14.2	13.9	12.6	11.9	11.1
Lost workday cases	7.9	7.9	7.1	6.6	6.7	6.7	6.9	6.2	6.4	6.5	6.0	5.5	5.3
Lost workdays	147.6	155.7	146.6	144.0	–	–	–	–	–	–	–	–	–
Industrial machinery and equipment:													
Total cases	12.1	12.0	11.2	11.1	11.1	11.6	11.2	9.9	10.0	9.5	8.5	8.2	11.0
Lost workday cases	4.8	4.7	4.4	4.2	4.2	4.4	4.4	4.0	4.1	4.0	3.7	3.6	6.0
Lost workdays	86.8	88.9	86.6	87.7	–	–	–	–	–	–	–	–	–
Electronic and other electrical equipment:													
Total cases	9.1	9.1	8.6	8.4	8.3	8.3	7.6	6.8	6.6	5.9	5.7	5.7	5.0
Lost workday cases	3.9	3.8	3.7	3.6	3.5	3.6	3.3	3.1	3.1	2.8	2.8	2.9	2.5
Lost workdays	77.5	79.4	83.0	81.2	–	–	–	–	–	–	–	–	–
Transportation equipment:													
Total cases	17.7	17.8	18.3	18.7	18.5	19.6	18.6	16.3	15.4	14.6	13.7	13.7	12.6
Lost workday cases	6.8	6.9	7.0	7.1	7.1	7.8	7.9	7.0	6.6	6.6	6.4	6.3	6.0
Lost workdays	138.6	153.7	166.1	186.6	–	–	–	–	–	–	–	–	–
Instruments and related products:													
Total cases	5.6	5.9	6.0	5.9	5.6	5.9	5.3	5.1	4.8	4.0	4.0	4.5	4.0
Lost workday cases	2.5	2.7	2.7	2.7	2.5	2.7	2.4	2.3	2.3	1.9	1.8	2.2	2.0
Lost workdays	55.4	57.8	64.4	65.3	–	–	–	–	–	–	–	–	–
Miscellaneous manufacturing industries:													
Total cases	11.1	11.3	11.3	10.7	10.0	9.9	9.1	9.5	8.9	8.1	8.4	7.2	6.4
Lost workday cases	5.1	5.1	5.1	5.0	4.6	4.5	4.3	4.4	4.2	3.9	4.0	3.6	3.2
Lost workdays	97.6	113.1	104.0	108.2	–	–	–	–	–	–	–	–	–

See footnotes at end of table.

55. Continued—Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 workers[3]												
	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]	1999[4]	2000[4]	2001[4]
Nondurable goods:													
Total cases	11.6	11.7	11.5	11.3	10.7	10.5	9.9	9.2	8.8	8.2	7.8	7.8	6.8
Lost workday cases	5.5	5.6	5.5	5.3	5.0	5.1	4.9	4.6	4.4	4.3	4.2	4.2	3.8
Lost workdays	107.8	116.9	119.7	121.8	–	–	–	–	–	–	–	–	–
Food and kindred products:													
Total cases	18.5	20.0	19.5	18.8	17.6	17.1	16.3	15.0	14.5	13.6	12.7	12.4	10.9
Lost workday cases	9.3	9.9	9.9	9.5	8.9	9.2	8.7	8.0	8.0	7.5	7.3	7.3	6.3
Lost workdays	174.7	202.6	207.2	211.9	–	–	–	–	–	–	–	–	–
Tobacco products:													
Total cases	8.7	7.7	6.4	6.0	5.8	5.3	5.6	6.7	5.9	6.4	5.5	6.2	6.7
Lost workday cases	3.4	3.2	2.8	2.4	2.3	2.4	2.6	2.8	2.7	3.4	2.2	3.1	4.2
Lost workdays	64.2	62.3	52.0	42.9	–	–	–	–	–	–	–	–	–
Textile mill products:													
Total cases	10.3	9.6	10.1	9.9	9.7	8.7	8.2	7.8	6.7	7.4	6.4	6.0	5.2
Lost workday cases	4.2	4.0	4.4	4.2	4.1	4.0	4.1	3.6	3.1	3.4	3.2	3.2	2.7
Lost workdays	81.4	85.1	88.3	87.1	–	–	–	–	–	–	–	–	–
Apparel and other textile products:													
Total cases	8.6	8.8	9.2	9.5	9.0	8.9	8.2	7.4	7.0	6.2	5.8	6.1	5.0
Lost workday cases	3.8	3.9	4.2	4.0	3.8	3.9	3.6	3.3	3.1	2.6	2.8	3.0	2.4
Lost workdays	80.5	92.1	99.9	104.6	–	–	–	–	–	–	–	–	–
Paper and allied products:													
Total cases	12.7	12.1	11.2	11.0	9.9	9.6	8.5	7.9	7.3	7.1	7.0	6.5	6.0
Lost workday cases	5.8	5.5	5.0	5.0	4.6	4.5	4.2	3.8	3.7	3.7	3.7	3.4	3.2
Lost workdays	132.9	124.8	122.7	125.9	–	–	–	–	–	–	–	–	–
Printing and publishing:													
Total cases	6.9	6.9	6.7	7.3	6.9	6.7	6.4	6.0	5.7	5.4	5.0	5.1	4.6
Lost workday cases	3.3	3.3	3.2	3.2	3.1	3.0	3.0	2.8	2.7	2.8	2.6	2.6	2.4
Lost workdays	63.8	69.8	74.5	74.8	–	–	–	–	–	–	–	–	–
Chemicals and allied products:													
Total cases	7.0	6.5	6.4	6.0	5.9	5.7	5.5	4.8	4.8	4.2	4.4	4.2	4.0
Lost workday cases	3.2	3.1	3.1	2.8	2.7	2.8	2.7	2.4	2.3	2.1	2.3	2.2	2.1
Lost workdays	63.4	61.6	62.4	64.2	–	–	–	–	–	–	–	–	–
Petroleum and coal products:													
Total cases	6.6	6.6	6.2	5.9	5.2	4.7	4.8	4.6	4.3	3.9	4.1	3.7	2.9
Lost workday cases	3.3	3.1	2.9	2.8	2.5	2.3	2.4	2.5	2.2	1.8	1.8	1.9	1.4
Lost workdays	68.1	77.3	68.2	71.2	–	–	–	–	–	–	–	–	–
Rubber and miscellaneous plastics products:													
Total cases	16.2	16.2	15.1	14.5	13.9	14.0	12.9	12.3	11.9	11.2	10.1	10.7	8.7
Lost workday cases	8.0	7.8	7.2	6.8	6.5	6.7	6.5	6.3	5.8	5.8	5.5	5.8	4.8
Lost workdays	147.2	151.3	150.9	153.3	–	–	–	–	–	–	–	–	–
Leather and leather products:													
Total cases	13.6	12.1	12.5	12.1	12.1	12.0	11.4	10.7	10.6	9.8	10.3	9.0	8.7
Lost workday cases	6.5	5.9	5.9	5.4	5.5	5.3	4.8	4.5	4.3	4.5	5.0	4.3	4.4
Lost workdays	130.4	152.3	140.8	128.5	–	–	–	–	–	–	–	–	–
Transportation and public utilities													
Total cases	9.2	9.6	9.3	9.1	9.5	9.3	9.1	8.7	8.2	7.3	7.3	6.9	6.9
Lost workday cases	5.3	5.5	5.4	5.1	5.4	5.5	5.2	5.1	4.8	4.3	4.4	4.3	4.3
Lost workdays	121.5	134.1	140.0	144.0	–	–	–	–	–	–	–	–	–
Wholesale and retail trade													
Total cases	8.0	7.9	7.6	8.4	8.1	7.9	7.5	6.8	6.7	6.5	6.1	5.9	6.6
Lost workday cases	3.6	3.5	3.4	3.5	3.4	3.4	3.2	2.9	3.0	2.8	2.7	2.7	2.5
Lost workdays	63.5	65.6	72.0	80.1	–	–	–	–	–	–	–	–	–
Wholesale trade:													
Total cases	7.7	7.4	7.2	7.6	7.8	7.7	7.5	6.6	6.5	6.5	6.3	5.8	5.3
Lost workday cases	4.0	3.7	3.7	3.6	3.7	3.8	3.6	3.4	3.2	3.3	3.3	3.1	2.8
Lost workdays	71.9	71.5	79.2	82.4	–	–	–	–	–	–	–	–	–
Retail trade:													
Total cases	8.1	8.1	7.7	8.7	8.2	7.9	7.5	6.9	6.8	6.5	6.1	5.9	5.7
Lost workday cases	3.4	3.4	3.3	3.4	3.3	3.3	3.0	2.8	2.9	2.7	2.5	2.5	2.4
Lost workdays	60.0	63.2	69.1	79.2	–	–	–	–	–	–	–	–	–
Finance, insurance, and real estate													
Total cases	2.0	2.4	2.4	2.9	2.9	2.7	2.6	2.4	2.2	.7	1.8	1.9	1.8
Lost workday cases	.9	1.1	1.1	1.2	1.2	1.1	1.0	.9	.9	.5	.8	.8	.7
Lost workdays	17.6	27.3	24.1	32.9	–	–	–	–	–	–	–	–	–
Services													
Total cases	5.5	6.0	6.2	7.1	6.7	6.5	6.4	6.0	5.6	5.2	4.9	4.9	4.6
Lost workday cases	2.7	2.8	2.8	3.0	2.8	2.8	2.8	2.6	2.5	2.4	2.2	2.2	2.2
Lost workdays	51.2	56.4	60.0	68.6	–	–	–	–	–	–	–	–	–

[1] Data for 1989 and subsequent years are based on the *Standard Industrial Classification Manual*, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985–88, which were based on the *Standard Industrial Classification Manual*, 1972 Edition, 1977 Supplement.

[2] Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries.

[3] The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where:
N = number of injuries and illnesses or lost workdays;
EH = total hours worked by all employees during the calendar year; and
200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[4] Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.

[5] Excludes farms with fewer than 11 employees since 1976.

NOTE: Dash indicates data not available.

56. Fatal occupational injuries by event or exposure, 1997-2002

Event or exposure[1]	Fatalities			
	1997-2001 average	2001[2]	2002	
		Number	Number	Percent
Total	6,036	5,915	5,524	100
Transportation incidents	2,593	2,524	2,381	43
Highway incident	1,421	1,409	1,372	25
Collision between vehicles, mobile equipment	697	727	635	11
Moving in same direction	126	142	155	3
Moving in opposite directions, oncoming	254	257	202	4
Moving in intersection	148	138	145	3
Vehicle struck stationary object or equipment	300	297	326	6
Noncollision incident	369	339	373	7
Jackknifed or overturned—no collision	300	273	312	6
Nonhighway (farm, industrial premises) incident	368	326	322	6
Overturned	202	158	164	3
Aircraft	248	247	192	3
Worker struck by a vehicle	382	383	356	6
Water vehicle	99	90	71	1
Rail vehicle	68	62	64	1
Assaults and violent acts	964	908	840	15
Homicides	709	643	609	11
Shooting	567	509	469	8
Stabbing	64	58	58	1
Other, including bombing	78	76	82	1
Self-inflicted injuries	221	230	199	4
Contact with objects and equipment	995	962	873	16
Struck by object	562	553	506	9
Struck by falling object	352	343	303	5
Struck by flying object	58	60	38	1
Caught in or compressed by equipment or objects	290	266	231	4
Caught in running equipment or machinery	156	144	110	2
Caught in or crushed in collapsing materials	126	122	116	2
Falls	737	810	714	13
Fall to lower level	654	700	634	11
Fall from ladder	111	123	126	2
Fall from roof	155	159	143	3
Fall from scaffold, staging	91	91	87	2
Fall on same level	61	84	63	1
Exposure to harmful substances or environments	529	499	538	10
Contact with electric current	291	285	289	5
Contact with overhead power lines	134	124	122	2
Contact with temperature extremes	41	35	60	1
Exposure to caustic, noxious, or allergenic substances	106	96	98	2
Inhalation of substances	52	49	49	1
Oxygen deficiency	89	83	90	2
Drowning, submersion	71	59	60	1
Fires and explosions	197	188	165	3
Other events or exposures[3]	21	24	13	–

[1] Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

[2] The BLS news release issued Sept. 25, 2002, reported a total of 5,900 fatal work injuries for calendar year 2001. Since then, an additional 15 job-related fatalities were identified, bringing the total job-related fatality count for 2001 to 5,915.

[3] Totals for 2001 exclude fatalities from the September 11 terrorist attacks.

[3] Includes the category "Bodily reaction and exertion."

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dash indicates less than 0.5 percent.

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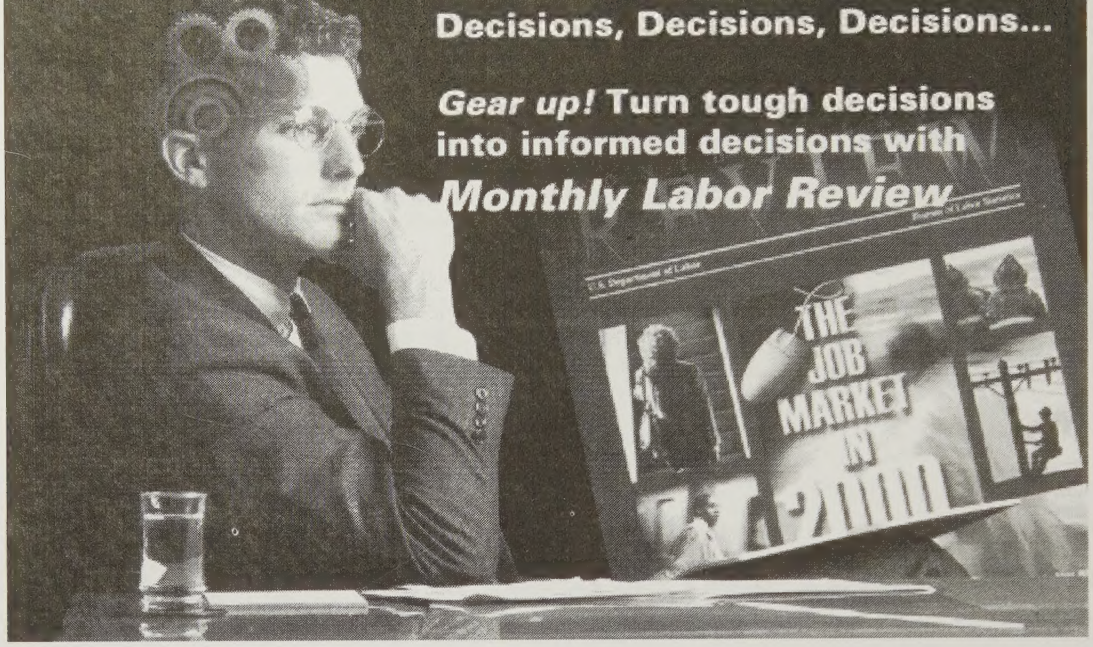
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